

## Course Detail

### Master of Science in Pharmacy Program in Pharmaceutics (International Program)

**Course Title:** Master of Science in Pharmacy Program in Pharmaceutics  
(International Program)

**Master Degree:** Master of Science in Pharmacy (Pharmaceutics)

**Academic Institution:** Faculty of Pharmacy, Departments of Pharmacy and  
Manufacturing Pharmacy

**Duration:** B.E. 2563-2565

#### Background and Rational:

The patients in developing and underdeveloped countries have difficulty to access the quality medicines because those new medicines are expensive. Because new medicines that are currently in use are mostly imported from abroad, those new medicines are still under patent protection. The medicines are also important essential factor for national security. The solution to such problems is to develop alternatives which include the development of new drugs, new treatments, or new generics for patent expired medicines. However, the development of new drugs needs intensive investment. The development of high quality health herbal products, new generics, and also new drug delivery system are challenging and can be alternatives in patients' treatment. There are a quality processes and format to follow in the development for those quality alternatives worldwide and within the region such as ASEAN COMMON TECHNICAL DOSSIER (ACTD) FOR THE REGISTRATION OF PHARMACEUTICALS FOR HUMAN USE. The pharmaceutics is an important and fundamental knowledge for the development for those quality alternatives.

Graduate Programs in Pharmaceutics, offered by joint collaboration between Department of Pharmacy and Department of Manufacturing Pharmacy, Faculty of Pharmacy, Mahidol University. The graduate program has a long history since it first started in 1975 to offer M.Sc. degree. Since the first Master program in 1975, our graduate study programs have grown considerably and have now become known as one of the best graduate programs among the Faculties of Pharmacy in Thailand. Currently, the Faculty offers an international graduate program in pharmaceutics. The program has been continuously improved to increase the quality of graduate students training and to keep up with forefront knowledge and technology in the field of Pharmaceutics. The Pharmaceutics is the science of research and development of pharmaceutical products, thus the results of the research or application of research in this program are aim to improve the drug formulation, absorption/bioavailability, stability with better delivery system. The research theme includes topics in pharmaceutics, biopharmaceutics, generics formula development, bioequivalence, novel drug delivery system, Absorption Distribution Metabolism Excretion Toxicity (ADMET) properties of new medicines etc. The development are not only for medicines but also extended for health products, functional foods, medicinal herbs, cosmetics, pharmaceutical devices.

All our academic staffs have held Ph.D. degree and have background knowledge covering all in Pharmaceutics fields domestically and internationally (including U.S.A., Europe and Asia). Most of academic staffs have strong experience in academic teaching, post-doctoral research, and research investigation. The research experience of our staffs has been guaranteed by a load of publications with continuation from the past to the present. All academic staffs are allowed to attend scientific international conference and international training course to gain new and updated knowledge, exchange research experience with world class academic/research staffs and strengthen research competencies. The graduate program is formulated to enhance graduates' skills, initiative thinking and academic leadership so that they can transfer knowledge and research experiences to the domestic and international society.

Our graduate programs employ both in- and off-departmental facilities and equipment. All necessary equipment which supports all research work is distributed between the department of pharmacy and department of manufacturing pharmacy. Moreover, there are central laboratory research facilities where all the students can utilize. The teaching and learning facilities used for graduate study are adequate to support all the courses and scientific researches and are managed to meet the requirement of learning activities and scientific research for the lecturers and students in the program. The wireless internet can be reached for all of the rooms. The students have access to study areas for self-study according their convenience upon request.

### Objectives:

The medicines and health products are one of the fundamentals of the living, the ultimate objective of the program is extended for the not just only the betterment for the whole international society through quality pharmaceutical product development. We will produce high calibre graduates for the international society who have the innovative thinking and will be responsible for quality pharmaceutical product development in their home countries.

### Course Synopsis & Methodology:

#### 1. Study plan:

##### Plan A2

Year	Semester 1			Semester 2		
1	GRID 603	Biostatistics	3(3-0-6)	PYPY 601	Advanced	3(3-0-6)
	PYID 685	Research Methodology In Pharmacy	2(2-0-6)		Biopharmaceutics	
	PYMP 641	Instrumental Research Techniques	1(0-3-1)	PYPT 601	Seminar in Pharmaceutics I	1(1-0-2)
	PYPY 660	Pharmaceutics Advanced	3(3-0-6)		Elective courses	8 credits
	PYMP 642	Pharmaceutics I Advanced Industrial Pharmacy I	3(2-3-5)			
		<b>Total</b>	<b>12 credits</b>		<b>Total</b>	<b>12 credits</b>

2	PYMP 602	Seminar in Pharmaceutics I	1(1-0-2)	PYPT 698	Thesis	6(0-18-0)
	PYPT 698	Thesis	6(0-18-0)			
	<b>Total</b>	<b>7 credits</b>	<b>Total</b>			

**7.2 Course Content/Study Topic:**

1) Required courses	17	credits
2) Elective courses not less than	8	credits
3) Thesis	12	credits
<b>Total not less than</b>	<b>37</b>	<b>credits</b>

1) Required courses	17	credits
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**Credits (lecture–practice–self-study)**

GRID 603	Biostatistics	3(3-0-6)
PYID 685	Research Methodology in Pharmacy I	2(2-0-4)
PYMP 641	Instrumental Research Techniques in Pharmaceutics	1(0-3-1)
PYPT 601	Seminar in Pharmaceutics I	1(1-0-2)
PYPT 602	Seminar in Pharmaceutics II	1(1-0-2)
PYPY 601	Advanced Biopharmaceutics	3(3-0-6)
PYPY 660	Advanced Pharmaceutics I	3(3-0-6)
PYMP 642	Advanced Industrial Pharmacy I	3(2-3-5)

**Credits (lecture–practice–self-study)****2) Elective courses not less than 8 credits**

PYPY 619	Advanced Pharmacokinetics	3(3-0-6)
PYPY 661	Advanced Pharmaceutics II	3(3-0-6)
PYPY 662	Cosmeceutical Sciences	3(2-3-5)
PYPY 663	Pharmaceutical Product Development I	3(2-3-5)
PYPT 603	Special Problems in Pharmaceutics	2(0-6-2)
PYMP 640	Industrial Administration	2(2-0-4)
PYMP 643	Advanced Industrial Pharmacy II	3(2-3-5)
PYMP 644	Unit Operations in Pharmacy	2(2-0-4)
PYMP 645	Manufacturing Process Analytical Technology	2(2-0-4)
PYMP 646	Pharmaceutical Product Development II	3(2-3-5)
PYMP 647	Manufacture of Natural Products	2(2-0-4)

In addition to elective courses mentioned above, a student may register other courses in international program offered by other faculties' equivalent to graduate studies, Mahidol University or the ones offered by other universities according to the student's interest with the approval of the curriculum committee or the advisor.

**Thesis**

PYPH 698 Thesis	Credits (lecture – practice – self-study)	12(0-36-0)
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**Applicants Qualifications:**

1. hold a Bachelor's degree in Pharmacy and meet the requirements set by the Faculty of Graduate Studies
2. have a minimum grade point average of 2.50
3. Pass the English Proficiency Examination (MU-GRAD TEST score  $\geq 60$ ) offered by the Faculty of Graduate Studies, Mahidol University, or TOEFL iBT 54 up or TOEFL ITP 480 up or IELTS 5.0 up
4. Exemption from the above conditions may be granted by the Programme Committee under exceptional circumstances.

**Document Required:**

Documents required for the applications include the copy of the following documents

1. Degree Certificate (English Translated)
2. Academic Transcript (English Translated)
3. Photo
4. Passport
5. Curriculum Vitae (CV)
6. Health Certificate
7. Recommendation Letters (to request via online admission system)
8. Additional documents:  
e.g. Statement of Purpose, Letter of Work Experience, Professional License, Publications, Scholarship Letter, Research Proposal, Concept Paper, etc.
9. English Proficiency Score Report (directly sent by the test center)

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\*\*\*The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.

## Course Detail

### Master of Science/Master of Engineering in Environmental Technology and Management

<b>Course Title:</b>	Environmental Technology and Management
<b>Master Degree:</b>	Master of Science/Master of Engineering (Environmental Technology and Management)
<b>Academic Institution:</b>	The Joint Graduate School of Energy and Environment (JGSEE), King Mongkut's University of Technology Thonburi (KMUTT)
<b>Duration:</b>	2 Academic Years (August 2021 – July 2023)

#### Background and Rationale:

Graduates from the Master of Science/Master of Engineering program in Environmental Technology and Management will demonstrate professionalism through their technical and academic knowledge and capabilities in practical problem-based research, and their morals and ethics towards sustainability and self-sufficiency development pathway, and the society. They will be able to conduct collaborative research and/or technical works at the local, national, and regional (e.g. GMS, ASEAN, etc.) levels on energy related environmental issues, including air quality, acid deposition and regional haze pollution, and global warming and climate change. Their abilities and skills include energy and environmental data and information analysis, diagnosis, and synthesis in order to develop, adapt and select appropriate technologies, methods and approaches, enabling a country to go towards green economy and sustainable development. Their professionalism should significantly benefit countries in the Asia-Pacific region as well as others in the world that are on the way of rapid growth development under the context of globalization.

#### Objectives

- To produce graduate scientists and engineers who have acquired advanced theoretical and practical knowledge and skill in the fields of energy and environment, professionally capable to analyze and synthesize data into key findings to be disseminated to stakeholders in native language and in English.
- To produce graduate environmental scientists and engineers who possess capabilities to judge what impacts on the environment are related to energy production and use.
- To promote capacity building by hands-on research and energy related environmental issues and challenges solving for both public and private sectors.

**Course Synopsis and Methodology:****1. Study plan 40 Credits**

	<b>Plan A2-1</b>	<b>Plan A2-2</b>
Compulsory	7	7
Specific Compulsory	9	9
Elective	3	3
Thesis	21	12
Internship	-	9
<b>Total</b>	<b>40</b>	<b>40</b>

**2. Course content**

1. Compulsory Courses 7 credits
  - JEE 611 Seminar 1 credit
  - JEE 613 Research Methodology 3 credits
  - JEE 625 Energy and Environmental Economics, Management and Policy 3 credits
  
2. Specific Compulsory Courses 9 credits
  - JEE 667 Environmental Pollution Control Technology 3 credits
  - JEE 683 Energy and Environment 3 credits
  - JEE xxx Specific Compulsory (As recommended by advisor)\* 3 credits
  - \*Select 3 credits from research focus as recommended by advisor
  - Advanced Fuel Processing Laboratory (AFPL)
  - JEE 658 Renewable Energy Technologies 3 credits
  - JEE 659 Energy from Biomass 3 credits
  - Building Energy Science and Technology Laboratory (BEST)
  - JEE 647 Design of Suitable Urban Ecology 3 credits
  
  - Tropical Climate Science Modeling Laboratory (TCSM)
  - JEE 661 Tropical Climates and Boundary Layer Science 3 credits
  - JEE 664 Atmospheric and Air Quality Modeling 3 credits
  - Advanced Greenhouse Gases and Aerosols Research Laboratory (AGAR)
  - JEE 673 Waste and Climate Change 3 credits
  - JEE 674 Waste to Energy and Its Sustainable Mitigation 3 credits
  - JEE 685 Climate Change: Physical Science Basis 3 credits
  - JEE 696 Greenhouse Gas Measurement, Mitigation and Monitoring Technology 3 credits
  - Life Cycle Sustainability Assessment Laboratory (LCSAL)
  - JEE 671 Life Cycle Assessment 3 credits
  - JEE 681 Environmental Chemistry and Toxicology 3 credits
  - JEE 682 Environmental and Health Risk Assessment 3 credits
  - JEE 684 GIS and Remote Sensing 3 credits

- Other		
JEE 604 Special Study II		3 credits
JEE 605 Special Study III		3 credits
3. Elective Courses	3 credits	
Select a 3 credit-course as recommended by advisor from the following list		
JEE 604 Special Study II		3 credits
JEE 605 Special Study III		3 credits
JEE 606 Mathematical Techniques		3 credits
JEE 645 Clean Technologies for Solid Fuels		3 credits
JEE 647 Design of Suitable Urban Ecology		3 credits
JEE 649 Energy Entrepreneurship		3 credits
JEE 653 Solar Energy		3 credits
JEE 656 Energy Efficiency		3 credits
JEE 658 Renewable Energy Technologies		3 credits
JEE 659 Energy from Biomass		3 credits
JEE 661 Tropical Climates and Boundary Layer Science		3 credits
JEE 664 Atmospheric and Air Quality Modeling		3 credits
JEE 671 Life Cycle Assessment		3 credits
JEE 673 Waste and Climate Change		3 credits
JEE 674 Waste to Energy and Its Sustainable Mitigation		3 credits
JEE 681 Environmental Chemistry and Toxicology		3 credits
JEE 682 Environmental and Health Risk Assessment		3 credits
JEE 684 GIS and Remote Sensing		3 credits
JEE 685 Climate Change: Physical Science Basis		3 credits
JEE 691 Climate Change Policy		3 credits
JEE 696 Greenhouse Gas Measurement, Mitigation and Monitoring Technology		3 credits
JEE 703 Selected Topics I		3 credits
JEE 713 Selected Topics II		3 credits
4. Thesis		
Plan A 2-1		
JEE 640 Thesis		21 credits
Plan A 2-2		
JEE 620 Thesis		12 credits
5. Internship		
Plan A 2-2		
JEE 616 Internship		9 credits
6. English Courses (Without Credit)		
LNG 601 Foundation English for International Programs		S/U*
LNG 602 Thesis Writing		S/U
* Only for students with condition to improve English skill since admission		



**Graduation Conditions:**

- **Earning credits:** The students are required to pass all the subjects (40 Credits) with minimum grade of each subject must be above C and the total average grade (GPA) must be above 3.00
- **Publications and research results:** 1 National Journal Paper

**Applicant Qualifications:**

M.Sc program must hold a first degree in engineering, science, economics, technology, agriculture or related fields. M.Eng program must hold in engineering only, with a minimum GPA of 2.50, or be ranked top 25% of the class. Applicants with other qualifications may be admitted on a case by case basis subject to the approval of JGSEE's Executive Committee.

**Document Required:**

- A copy of passport (Bio page)
- 1 Inch size photo
- Full transcript with date of graduation
- 3 letters of recommendation
- Tentative proposal
- English proficiency test result (IELTS 6, TOEFL iBT 78, International program within 2 years)

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## Course Detail

### Master of Science Program in Food Science and Technology (International Program)

<b>Course Title:</b>	Master of Science Program in Food Science and Technology (International Program) New Curriculum 2015
<b>Master Degree:</b>	Master of Science (Food Science and Technology)
<b>Academic Institution:</b>	Faculty of Agro-Industry, Chiang Mai University
<b>Duration:</b>	2 Academic years

#### **Background and Rational:**

The International Program of Master's Degree in Food Science and Technology has been approved and provided by Faculty of Agro-Industry, Chiang Mai University, beginning year of the program in Academic Year 2015 as its first semester.

The Master of Science curriculum in Food Science and Technology (International Program) is the curriculum that emphasizing the internationalization by integrating advanced knowledge in the field of Food Science and Technology for food production with quality and safety in response to the demands of the world's market through research process and creation of knowledge. This will lead to the improvement and efficient development of food production and processing on national, South East Asia sub region, and international levels.

This science program on graduate study level, taught in English, will be recruiting both qualified Thai and International students. This program offers an opportunity to a select group of international students to learn and experience how to conduct a research and innovation in the field of Food Science and Technology by focusing on research with the characteristics of cooperation and multi-Interdisciplinary in order to implement acquired knowledge which is beneficial for the industrial development on both national and international levels.

There are many career options for students in the international program after their graduation i.e. Food Scientist, Food Safety Supervisor, Food Safety Inspector, Food Engineering Expert or Supervisor, Nutritionist, Lecturer, Academic Expert, Nutrition Consultant, Food Safety Consultant, Food Processing Consultant, Agro-Industrial business company owner, Factory entrepreneur, Food Product Supervisor, Quality Assurance Supervisor, Agro-Industrial Researcher and Product Development Manager.

#### **Objectives:**

1. To produce the graduates who have knowledge, ability and skills to carry out work relevant to food production and food quality control utilizing advanced level food technologies with the research ability in the field of Food Science and Technology. These can be achieved through critical thinking, analyses, and integration of the theoretical concepts on advanced level of Food

Science and Technology so that food industrial based problems or improvement can be resolved effectively.

2. To produce the graduates who have virtue, ethics, and maturity in performing the proper profession in both governmental and private sectors with the ability of analytical thinking and tackle problems based on systematic approach and morality.

3. To produce the graduates who have the ability in promoting the knowledge at both local and international levels. This will also include knowledge exchange with academics, policy makers, and members of the food industry organization in order to develop such organization in accordance with the international standard.

4. To produce the graduates who have good human relations are able to communicate with group members are able to implement of various types of information technology and are able to plan an efficient personal and organizational improvement.

### Course Synopsis and Methodology:

#### Study plan

#### Length of Program

The program is designed to be two academic years, and the period of study shall not exceed 4 academic years for both Plan A Type A1 and Plan A Type A2

#### 1. Plan A Type A 1

##### First Year

First semester		Credits	Second Semester		Credits
	Preparation of thesis proposal	-	601797	Thesis	12
	Proposing of thesis topic	-		Organizing seminar and presentation	-
<b>Total</b>		-		<b>Total</b>	<b>12</b>

##### Second year

First semester		Credits	Second Semester		Credits
601797	Thesis	12	601797	Thesis	12
	Organizing seminar and presentation	-		Organizing seminar and presentation	-
				Taking the comprehensive examination	
				Defending Thesis	
<b>Total</b>		12		<b>Total</b>	12

**Total 36 credits throughout the program**

**2. Plan A Type A 2****First year**

First semester		Credits	Second Semester		Credits
604715	Physical and Engineering Properties of Foods	3	601745	Advanced Food Processing and Technology	3
601731	Advanced Food Microbiology	3	601775	Advanced Food Science and Food Analysis	4
601758	Food Research Statistics	3		Elective subject	3
	Elective subject	3		Organizing seminar and presentation	-
	Organizing seminar and presentation	-		Preparation of thesis proposal	-
				Proposing of thesis topic	-
	Total	12		Total	10

**Second Year**

First semester		Credits	Second Semester		Credits
601791	Seminar 1	1	601792	Seminar 2	1
601799	Thesis	6	601799	Thesis	6
	Total	7		Total	7

**A total of credits throughout the program will not be lesser than 36 credits**

**Academic Year (2017)**

First Semester: August – December

Second Semester: January – May

Summer (Optional): Not available

Curriculum Operation: Semester System (bi – semesters)

One regular semester with no less than 15 weeks  
in each semester

Leaning time: in Office hours from Mon. – Fri.  
at 08.30 a.m. – 04.30 p.m.)

**Field of Research**

The International Program provides the advanced learning and research in the field of Food Science and Technology.

Courses**Program of Study****1. Plan A Type A 1**

<b>Degree Requirements</b>	<b>36</b>	<b>credits</b>
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**A. Thesis 36 credits**

601797 FST 797 Master's Thesis	36	credits
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**B. Academic activities**

1) A student has to organize and present a seminar on the topic related to his/her thesis for at least 3 semesters and students have to attend seminar every semester throughout the studying period

2) The thesis or part of the thesis must

2.1) At least 1 master's thesis work or a part of master's thesis work must be published or at least accepted to publish in English in a national journal listed in TCI Tier 1 database and the student's name must be listed as the first author, **and** at least 1 master's thesis work or a part of master's thesis work must be presented in national conference accepted by the field of study and a full paper, written in English with the name of student listed as the first author, must be published in the peer reviewed Proceedings; **OR**

2.2) Be granted a patent **and** at least 1 master's thesis work or a part of master's thesis work must be presented in an international conference accepted by the field of study; and a full paper, written in English with the name of student listed as the first author, must be published in the peer reviewed Proceedings.

3) A student has to report thesis progression by following the format of results report stipulated by the Graduate School with approval by the Chairman of the Graduate Study Committee every semester

**C. Non-credit Courses**

1) Graduate School requirement : English language

2) Program requirement: in accordance with the consent of the adviser or the curriculum committee

**D. Comprehensive examination**

The student has to send a request form for comprehensive examination to Graduate School which is pre-approved by general or thesis advisers.

**2. Plan A Type A2**

<b>Degree Requirements</b>	<b>a minimum of</b>	<b>36 credits</b>
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<b>A. Coursework</b>	<b>a minimum of</b>	<b>24 credits</b>
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<b>1. Graduate Courses</b>	<b>a minimum of</b>	<b>24 credits</b>
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1.1 Subjects inside field of concentration	a minimum of	24 credits
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1.1.1 Required courses		18 credits
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601731 FST 731	Advanced Food Microbiology	3 credits
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601745 FST 745	Advanced Food Processing and Technology	3 credits
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601758 FST 758	Food Research Statistics	3 credits
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601775 FST 775	Advanced Food Science and Food Analysis	4 credits
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601791 FST 791	Seminar 1	1 credit
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601792	FST 792	Seminar 2	1 credit
604715	FE 715	Physical and Engineering Properties of Foods	3 credits

1.1.2 Elective courses a minimum of 6 credits

The students select elective courses as following:

601711		Cereal and Legume Chemistry	3 credits
601712		Carbohydrate in Foods	3 credits
601722	FST 722	Enzymes in Food Processing	3 credits
601723	FST 723	Minimally Processed Fruits and Vegetables	3 credits
601724	FST 724	Advanced Food Technology	3 credits
601729	FST 729	Fresh Product Management	3 credits
601742	FST 742	Food Encapsulation Technology	3 credits
601743	FST 743	Food Powder Technology	3 credits
601744	FST 744	Production Technology for Aerated Foods	3 credits
601746	FST 746	Advanced Marine Biotechnology	3 credits
601753	FST 753	Quality Control and Safety in Marine Products	3 credits
601754	FST 754	Utilization of Seafood Waste in Healthy Foods	3 credits
601755	FST 755	Mathematical Modeling for Bioprocess	3 credits
601765	FST 765	Food for Health	3 credits
601766	FST 766	Nutrition Labelling of Processed Food	3 credits
601767	FST 767	Advanced Human Nutrition	3 credits
601768	FST 768	Protein Functionality and Application	3 credits
601769	FST 769	Nutrient Metabolism	3 credits
601770	FST 770	Nutrition in Health and Disease	3 credits
601787	FST 787	Selected Topics in Food Science and Technology 1	1 credit
601788	FST 788	Selected Topics in Food Science and Technology 2	2 credits
601789	FST 789	Selected Topics in Food Science and Technology 3	3 credits
601811	FST 811	Dairy Chemistry and Microbiology	3 credits
601844	FST 844	Advanced Food Stability	3 credits
603724	PKT 724	Advanced Food Packaging Materials and Testing	3 credits
603743	PKT 743	Food Packaging Innovation	3 credits
603752	PKT 752	Food Packaging Design and Marketing	3 credits
604741	FE 741	Equipment Design in Food Industry	3 credits
604743	FE 743	Rheology of Foods and Biomaterials	3 credits
604751	FE 751	Postharvest System Engineering of Agricultural Products	3 credits
604761	FE 761	Drying Technology	3 credits
604762	FE 762	Frying Technology	3 credits
604764	FE 764	Membrane Technology	3 credits
604765	FE 765	Extrusion Technology	3 credits
604766	FE 766	Non-thermal Food Processing	3 credits
604767	FE 767	Supply Chain Management in Food Industry	3 credits

604843	FE 843	Advanced Kinetic Analysis in Food Process Engineering	3 credits
604844	FE 844	Advanced Processing and Biochemistry of Functional Foods	3 credits
604845	FE 845	Food Preservation by Pulsed Electric Fields	3 credits
604846	FE 846	Transport Phenomena in Food Processing	3 credits
604847	FE 847	Water Activity in Food Process Engineering	3 credits
604848	FE 848	Fluidization in Food Processing	3 credits
604849	FE 849	Development of Mathematical Modeling and Simulation in Food Process Engineering with Visual Basic Applications Programming	3 credits

or select from subjects with course code level of 700 or above with the consent of the graduate program administrative committee

1.2 Subjects outside field of concentration (If any) with course code level of 700 or above with the consent of the graduate program administrative committee

## **2. Advanced Undergraduate Subjects - none -**

**B. Thesis** **12 credits**  
601799 FST 799 Thesis 12 credits

## **C. Non-credit Courses**

- 1) Graduate school requirement: - a foreign language
- 2) Program requirement

Students who did not graduate from the field of Food Science and Technology in Bachelor Degree level are required to enroll in the subjects which will not be included as cumulative credits as following;

601701 FST 701	Food Microbiology and Chemistry	4 credits
601702 FST 702	Food Processing and Engineering	4 credits

The assessment result will be presented in S/U grading: "S" stands for "satisfactory" and "U" stands for "unsatisfactory" works.

## **D. Academic activities**

- 1) A student has to organize and present a seminar on the topic related to his/her thesis for at least 2 semesters and students have to attend seminar every semester throughout the studying period
- 2) The thesis or part of the thesis must
  - 2.1) be published or be processed to ensure that the research results or part of research results are accepted for at least one publication in the international journal or academic article with database at the Tier 1 level or be presented in the academic conference with at least one proceeding and the name of the student must appear as first author for at least one item. The published article must also be in full paper format in the journal with a peer reviewing committee or
  - 2.2) be granted a petty patent or a patent
- 3) A student has to report thesis progression by following the format of results report stipulated by the Graduate School with approval by the Chairman of the Graduate Study Committee every semester

**Graduation Conditions:****The Curriculum for Plan A Type A 1 program**

1. A student must pass the foreign language examination under the requirements set by the graduate school of Chiang Mai University.

2. A student must complete all requirements of the program division.

3. A student must pass the comprehensive examination.

4. A student must successfully pass the thesis defense examination.

5. The whole or part of a thesis must be

5.1 Be published or processed to ensure that the research results or part of research results are accepted for at least one publication in the scientific journal or academic article, and be presents in the academic conference with at least one proceeding and the student must appear as the first author for at least in one item. The published article must also be in full paper format in the journal with a peer reviewing committee or

5.2 Be granted a petty patent or a patent or be published in the journal or academic article for at least one item or be presented in the academic conference with at least one proceeding and the name of the student must appear as first author for at least one item. The published article must also be in full paper format in the journal with a peer reviewing committee.

6. A student must meet the qualifications as outlined in the Chiang Mai University Regulations on student honors, 2023

**The Curriculum for Plan A Type A 2 program**

1. A student must pass the foreign language examination under the requirements set by the graduate school of Chiang Mai University.

2. A student must complete the coursework and meet all requirements of the program division.

3. A student must earn the cumulative GPA of at least 3.00 and have the GPA of at least 3.00 for subjects in field of concentration.

4. A student must successfully pass the thesis defense examination.

5. The whole or part of a thesis must be

5.1 Be published or processed to ensure that the research results or part of research results are accepted for at least one publication in the journal or academic article or be presents in the academic conference with at least one proceeding and the name of the student must appear as the first author for at least in one item. The published article must also be in full paper format in the journal with a peer reviewing committee or

5.2 Be granted a petty patent or a patent.

6. A student must meet the qualifications as outlined in the Chiang Mai University Regulations on student honors, 2023.

**Applicant Qualifications:**

1. This will be in accordance with the Chiang Mai University Announcement of Candidates Eligible for Admission to an International Graduate Program for each academic year.

2. The students must complete a Bachelor's degree in the field of Food Science and Technology, Food Processing Technology, Packaging Technology, Marine Product



Technology, Product Development Technology, Biotechnology, Nutrition Sciences or other related fields, with a minimum grade point average (GPA) of 2.50 and graduated from either educational institutions accredited by the Office of Higher Education Commission or from other institutions with grade point equivalent to 2.50

3. Pass the fundamental English language qualification and show the proof of English test which must be valid within 2 years from the counting time of the application date.

The evidence must indicate the minimum standards in the English language below:

TOEFL Minimum 523 (paper-based) or

Minimum 523 (ITP) or

Minimum 193 (CBT) or

Minimum 69 (IBT) or

IELTS band 5.5 or

CMU-eTEGS 65

4. For the lack of evidence or the applicant has the proof of English language which is resulted less scores than the required standards above (no. 3), the approval of admission will be considered on the consent of the curriculum management committee.

In case that the applicant is accepted to the program, he/she must take an English proficiency test and provide further the proof of result which passes the requiring standards announced by the Graduate School, prior to submit the thesis topic and draft of proposal.

5. Other qualifications apart from those mentioned will be given according to the discretion of the Committee of Graduate Program in the Division of Food Science and Technology.

### **Document Required:**

Application materials:

1. A completed application form
2. Four 1-inch square photographs of ID/ passport type taken not more than six months.
3. An official proof of the applicant's undergraduate degree.
4. An official transcript written in English of the applicant's academic records.
5. A letter of recommendation written by the head of the applicant's affiliated institution or enterprise.
6. The applicant's concept proposal of about 800 – 1,000 words in one page of A4 paper-typed describing the research outline and/or previous research experience and research work presented at meetings and/or published (if any).
7. Official proof of English proficiency such as either the TOEFL or the IELTS with the following score criteria;

TOEFL Minimum 523 (paper-based) or

Minimum 523 (ITP) or

Minimum 193 (CBT) or

Minimum 69 (IBT) or

IELTS band 5.5 or

CMU-eTEGS 65

8. Copy of Awards/ Certification (If any).
9. Additional documents: A copy of valid passport

**Contact:**

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\*\*\*The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.

## Course Detail

### Master of Science Program in AgriScience and Technology (Postharvest) (International Program)

**Course Title:** AgriScience and Technology (Postharvest) (International Program)

**Master Degree:** M.Sc. in AgriScience and Technology (Postharvest)

**Academic Institution:** Division of Postharvest Technology  
School of Bioresources and Technology  
King Mongkut's University of Technology Thonburi (KMUTT)  
126 Pracha-Uthit Road, Bangmod, Thungkru, Bangkok 10140

**Duration:** 2 years (August 2021 – July 2023)

#### **Background and Rational:**

In less-developed countries, both quantitative and qualitative losses of agricultural products extremely variable magnitude occur at all stages of supply chain from production, harvesting, through handling, storage, processing and marketing (wholesale and retail) to final deliver to the consumer. Postharvest losses of agricultural products estimated about 25% of fruits, 40% vegetables and 15-20% grains are wasted during pre-harvest and post-harvest period. Hence the elimination of losses in agricultural products is important to augment food availability and food security for human in every nation.

In Thailand, there are plenty of raw agricultural commodities, which are produced for local market. The quality of such products is seldom adequate for export markets. At present, the export potential of the tropical to temperate zone is more quantity but the serious limitations are the failure to maintain the quality of produce and lack of appropriate handling techniques to reduce losses at harvest and after harvest. Therefore, King Mongkut's University of Technology Thonburi, feeling it had a key role to play, established the Postharvest Technology Program in 1993 to be response for graduate programs, research and development with the application of adequate technologies to solve the problem of losses and to control the quality of raw agricultural products after harvest.

In line with the government policy to improve the relationship between Thailand and ASEAN members as well as other partnership. KMUTT is willing to assist our partnership to develop human capabilities including training and technical exchanges. In doing this, the postharvest technology division is being conducted in English and accepted students from the Indochina, ASEAN and other regional countries. Students will be encouraged to do work in which research directions are motivated by problems in their countries to satisfy the country needs.

The division of postharvest technology offers graduate work leading to Master of Science in AgriScience and Technology (Postharvest) with majors in pre-harvest and postharvest

technology of perishable crops, postharvest technology of cereals and grain legumes. With a major, the main areas of specialization are physiology, entomology, pathology and engineering. The facilities available for graduate training include green house, laboratory of postharvest physiology, laboratory of postharvest enzymes and molecular biology, packinghouse unit and others. Graduate work in this division is designed to develop a high order of independent thought, broad knowledge and technical skills. The emphasis in graduate work is placed on research, supplemented by courses and seminars.

### Objectives:

To develop an effective graduate program in postharvest technology by promoting research activities to meet national and international needs as well as promoting linkages between institute. In addition, to produce qualified students with knowledge and ability to solve problems on pre and postharvest losses of agricultural products.

### Course Synopsis and Methodology:

#### 1. Study plan

<u>1<sup>st</sup> Year/ 1<sup>st</sup> Semester</u>		<b>Credit (Lecture-Practical-Shelf study)</b>
Code	Subject	(hour/week)
PHT 601	Research Techniques in Postharvest Technology	3 (2-3-7)
PHT 621	Postharvest Handling System of Perishable Crops	3 (2-3-7)
PHT xxx	Elective 1	<u>3</u> (x-x-x)
PHT xxx	Elective 2	<u>3</u> (x-x-x)
Total		12
Accumulative credit		12
<u>1<sup>st</sup> Year/ 2<sup>nd</sup> Semester</u>		<b>Credit (Lecture-Practical-Shelf study)</b>
Code	Subject	(hour/week)
PHT 612	Agricultural Production Systems	3 (2-3-7)
PHT 691	Seminar in Postharvest Technology I	1 (0-2-7)
PHT 699	Thesis	2 (-)
PHT xxx	Elective 3	<u>3</u> (x-x-x)
Total		9
Accumulative credit		21
<u>2<sup>nd</sup> Year/ 1<sup>st</sup> Semester</u>		<b>Credit (Lecture-Practical-Shelf study)</b>
Code	Subject	(hour/week)
PHT 698	Special Problem	3 (0-3-9)

PHT xxx	Elective 4	3 (x-x-x)
PHT 699	Thesis	3 (-)
Total		9
Accumulative credit		30
<b><u>2<sup>nd</sup> Year/ 2<sup>nd</sup> Semester</u></b>		<b>Credit (Lecture-Practical-Shelf study)</b>
Code	Subject	(hour/week)
PHT 692	Seminar in Postharvest Technology II	1 (0-2-7)
PHT 699	Thesis	7 (-)
Total		8
Accumulative credit		38

### **Estimated timeline for thesis plan**

Submission of thesis proposal : February 2022

Thesis proposal examination : May 2022

First thesis progressive examination : December 2022

Second thesis progressive examination : May 2023

Comprehensive examination : July 2023

Thesis defense examination : December 2023

## **2. Course Content**

The division of postharvest technology offers graduate work leading to Master of Science in AgriScience and Technology (Postharvest) with majors in pre-harvest and postharvest technology of perishable crops, postharvest technology of cereals and grain legumes. With a major, the main areas of specialization are physiology, entomology, pathology and engineering. The facilities available for graduate training include green house, laboratory of postharvest physiology, laboratory of postharvest enzymes and molecular biology, packinghouse unit and others. Graduate work in this division is designed to develop a high order of independent thought, broad knowledge and technical skills. The emphasis in graduate work is placed on research, supplemented by courses and seminars.

### ***CURRICULUM***

#### **Course Requirement**

##### ***1. Compulsory Courses 14 credits***

PHT 601 Research Techniques in Postharvest Technology	3 (2-3-7)
PHT 612 Agricultural Production Systems	3 (3-0-9)
PHT 621 Postharvest Handling System of Perishable Crops	3 (2-3-7)
PHT 691 Seminar in Postharvest Technology I	1 (0-2-7)
PHT 692 Seminar in Postharvest Technology II	1 (0-2-7)
PHT 698 Special Problem	3 (0-3-9)

##### ***2. Electives in Postharvest Technology Courses 12 credits***

PHT 602 Statistics for Agricultural Research	3 (2-3-9)
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PHT 603 Agricultural Information Systems	3 (2-3-9)
PHT 611 Postharvest Losses of Agricultural Products	3 (3 0 9)
PHT 622 Postharvest Physiology and Technology of Agricultural Commodities	3 (3-0-9)
PHT 623 Postharvest Handling System of Ornamental Plants	3 (2-3-7)
PHT 624 Fresh-cut Technology for Fruits and Vegetables	3 (2-3-7)
PHT 631 Postharvest Handling System of Cereals and Grains	3 (3-0-9)
PHT 632 Postharvest Technology of Seeds	3 (2-3-7)
PHT 651 Smart Farming Systems and Emerging Technology	3 (3-0-9)
PHT 652 Management System Designs of Packing House for Agricultural	3 (3-0-9)
PHT 653 Produce Packaging System	3 (2-3-7)
PHT 661 Postharvest Insect Pest of Agricultural Products	3 (2-3-7)
PHT 662 Postharvest Pathology of Agricultural Products	3 (2-3-7)
PHT 671 Supply Chain Management and Logistics for Agricultural Commodities	3 (3-0-9)
PHT 672 Quality Management of Agricultural Produce	3 (3-0-9)
PHT 673 Business Management of Agricultural Commodities	3 (3-0-9)
PHT 697 Selected Topics in Postharvest Technology	3 (3-0-9)
<i>3. Master Thesis</i>	
PHT 699 Thesis	12 credits

### **Graduation Conditions:**

Students who want to graduate must fulfill the requirements as the follows;

- Students must complete study according to curriculum structures.
- Students must fulfill the program requirement with a GPA of at least 3.00.
- Students must pass a comprehensive examination.
- Pass a thesis defense examination with the result “PASSED”.
- Before being awarded a degree, students need to have their research work published in recognized national or international journals/proceeding, or their equivalent.

### **Applicant Qualifications:**

Applicants must hold a Bachelor's Degree in Engineering or Science (Agriculture, relevant Biological or Environmental Science, Food technology) average (GPA) of 2.75 or must has an experience in professional work at least 1 year.

### **Document Required:**

- Application form
- Completed transcript record
- Curriculum vitae
- Health examination certificate (**not over than 3 months**)
- Statement of academic background in bachelor’s degree including brief of research experience
- Statement of study plan in Thailand

**Contact:**

1. Contact person for the detail of study program

Assoc. Prof. Dr. Varit Srilaong  
Division of Postharvest Technology  
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2. Program coordinator/ Student administrator

Assoc. Prof. Dr. Varit Srilaong  
Division of Postharvest Technology  
School of Bioresources and Technology  
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## Course Detail

### Master of Public Health (Global Health) (International Program)

<b>Course Title:</b>	Master of Public Health in Global Health Programme (International Programme)
<b>Master Degree:</b>	Master of Public Health (Global Health) M.P.H. (Global Health)
<b>Academic Institution:</b>	Faculty of Public Health, Thammasat University
<b>Duration:</b>	Independent Study (capstone project) 1 Year Thesis Research 2 Years

### Background and Rational

The 20th century public health paradigm must be transformed into a 21st century global health model of partnership created on principles of equality, transparency, mutual interest, and respect in order to effectively address critical problems in population health. The Thammasat Faculty of Public Health is leading the way to develop international collaborations in education and research reflecting this new model. Our priorities include developing a graduate programme that defines global health from a socio-political perspective with an emphasis on interregional capacity building applying a South-to-South focus (Africa, Asia-Pacific and Middle East).

While enormous progress has taken place in aspects of biomedical science, the tools of public health and management, and social and political engagement, it is only when these elements come together that we have seen real and lasting strides in improving the health and wellbeing of the world's disadvantaged citizens. By using our collective multidisciplinary and multi-sector experiences, resources, and expertise we can help change the fundamentals of global health. Not alone in narrow disciplines, but through partnerships that draw on differing perspectives, differing knowledge and experience, and differing priorities. Understanding how to mobilize such partnerships, how to make them most effective, and where to turn for experience empowers us at the global stage. The programme aims to produce the intellectual foundation supporting a 21st century model of global health.

### Objectives:

The programme's objectives, expressed as core and functional competencies, that students are expected to achieve are as follows:

#### *Core competencies*

- Analyse the major underlying determinants of ill population health in countries and identify how human rights and social justice concepts and instruments provide a framework to promote global health.
- Analyse the political dimension of global health, including the processes by which health diplomacy influences the adoption and enforcement international laws, conventions, agreements, norms and standards through global actors and transnational networks. This should include the domains of trade, labour, food supply, the environment,



pharmaceuticals, international aid, human rights, and conflict.

- Analyse the principles and practices that foster collaborative and multi-stakeholder design, management, and evaluation of programmes in middle- and low-income countries to assure equitable access to quality health services.

### ***Functional competencies***

#### *Information for decision-making*

- Conduct effectively literature review and analyses
- Use effectively appropriate research methods including quantitative and qualitative approaches (epidemiologic, bio-statistical, and content analysis techniques for data analysis).
- Analyse global and regional burdens of the most important health problems contributing to excess morbidity and mortality in middle- and low-income countries, including their magnitude and distribution.
- Analyse disparities in health status by gender, race, ethnicity, rural/urban status, and economic class, and other relevant determinants in the context of existing epidemiological, bio-statistical, and qualitative data.
- Effectively apply communication concepts, skills and techniques for awareness raising and advocacy in decision-making

#### *Design, management and evaluation*

- Use effectively information for programme design in order to develop evidence-based, realistic and innovative programme responses to the underlying determinants of health inequities and disease.
- Understand and use management techniques that promote sustainability and cost-effectiveness of programmes.
- Assess the appropriateness of population-based intervention strategies to address major health problems in middle- and low-income settings, including locally determined priorities and their efficacy, cost-effectiveness, and feasibility in reaching all segments of the population.
- Identify and apply effective strategies for community development, systems advocacy; public awareness; policy advocacy; global diplomacy
- Apply collaborative and culturally relevant leadership skills to implement evidence-based policies and plans to solve public health problems in national and global settings.
- Evaluate and establish priorities to improve the health status of populations in middle- and low-income settings, with focus on applying integrated strategies.

#### *Capacity development for global health*

- Analyse and explain the economic, social, political, and academic conditions that impact capacity development.
- Apply systems thinking to enhance capacity development in countries.

### **Course Synopsis and Methodology:**

The international Master of Public Health (MPH) is the most widely recognized professional degree for leadership in public health. The MPH (Global Health) Programme at Thammasat University offers a rigorous curriculum with a concentration in global health that attracts dedicated and ambitious professionals with a passion to build a career in the global public

health arena. The programme's core coursework aims to develop candidates' key public health competencies and skills using cases and examples illustrating the global-local interface. The MPH programme at Thammasat University applies a highly interactive, student-centered and problem-based learning approach.

All MPH (Global Health) students are required to complete a set of public health core courses. In addition, students must enroll in a set of global health concentration courses. Students can then opt either for thesis research or an independent study plan (capstone project) complemented by elective coursework to reach a minimum total of 45 study credits.

### **STUDY PLAN**

The programme is designed to offer 2 study plans namely:

Plan-A: Thesis Research which encompasses up to 13 months (comprising of 1-month pre-programme seminars plus 3 consecutive terms) of full time on campus study followed by up to 12 months (3 consecutive terms) field based study to complete thesis research.

Plan-B: Independent Study which encompasses 15 months of full time on campus study (comprising of 1-month pre-programme seminars plus 3 consecutive terms plus 2 months for report writing and wrap-up).

### **COURSE CONTENT/STUDY TOPIC:**

#### *Public Health Core Courses (3 credits each)*

GH600 Social Determinants of Health  
 GH601 Physical Environments and Health  
 GH602 Applied Epidemiology  
 GH603 Applied Biostatistics  
 GH604 Policy Development & Analysis  
 GH605 Foundations of Global Health-1 (exchange)

#### *Global Health Concentration Courses (2 credits each)*

GH610 Human Security: A Global Perspective  
 GH611 Human Rights and Global Health  
 GH612 Mobility and Global Health  
 GH613 Disease Control and Global Health  
 GH614 The Political Economy of Global Health  
 GH615 Research Methods in Global Health  
 GH616 Globalization and Health Systems  
 GH617 Foundations of Global Health-2 (exchange)  
 GH618 Global Health Practicum (exchange)

#### *Elective Courses Eco-Health (2 credits each)*

GH620 Eco-systems and Health  
 GH616 Globalization and Health Systems  
 GH622 One Health Management  
 GH623 Seminars in Eco and One Health

#### *Elective Courses Non-Communicable Diseases (2 credits each)*

GH630 Reframing Non-Communicable Diseases

GH631 Global Health and Ageing  
 GH632 Global Mental Health  
 GH633 Public Nutrition and Global Health  
 GH634 Violence and Global Health

*Elective Courses Crisis and Health (2 credits each)*

GH640 Public Health and Natural Hazards  
 GH641 Epidemic Management and Control  
 GH642 Public Health and Conflict

*Elective Courses Leadership and Management (2 credits each)*

GH650 Strategic Management and Leadership  
 GH652 Public Health Management  
 GH653 Program Evaluation

*General Electives Courses*

GH660 Measurement in Global Health	(2 credits)
GH662 Health in Detention	(2 credits)
GH663 Special Topics in Global Health	(1 credits)
GH664 Special Topics in Global Health	(2 credits)
GH665 Special Topics in Global Health	(3 credits)
GH666 Qualitative Approaches to Inquiry	(3 credits)
GH667 Health Literacy Assessment and Intervention	(2 credits)
GH668 Environmental Threats and Global Health	(2 credits)
GH700 Independent Study	(6 credits)
GH800 Thesis Research	(15 credits)

### Applicant Qualifications

- Hold at least a bachelor's degree or equivalent from domestic or overseas educational institutions accredited by the Thammasat University Council.
- Have a minimum cumulative grade point average of 2.75 or equivalent.
- **For all non-native speakers**, proven English language proficiency is a precondition for programme enrolment.
  - Minimum TOEFL score of PBT 550 or CBT 213 computer-based or iBT 79 or Minimum IELTS 6.0
- Preferably, have a proven minimum of two years professional experience.

### Document Required

- Completed application form
- Copy of degree certificates
- Copy of degree transcripts
- Copy of TOEFL or IELTS test score sheet
- Copy of valid passport
- Letter of reference
- Letter of motivation
- Medical certificate

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**Coordinators** Ms. Sirada Sahaimitr  
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## Course Detail

### **Master of Science in Pharmacy Program in Clinical Pharmacy (International Program)**

<b>Course Title:</b>	Master of Science in Pharmacy Program in Clinical Pharmacy (International Program)
<b>Master Degree:</b>	Master of Science in Pharmacy (Clinical Pharmacy)
<b>Academic Institution:</b>	Faculty of Pharmacy, Departments of Pharmacy
<b>Duration:</b>	1 - 2 years B.E. 2563-2565

#### **Background and Rational:**

Current circumstances or economic development that are taken into account for curriculum planning are derived from a framework of Economics and Social Development Plan No. 12 (2017-2022). It is under the management philosophy of sufficient economy to accommodate the changes that have affected both positive and negative aspects for Thailand. This strengthens and utilizes existing potentials to be beneficial for country development by giving priority to local economy focusing on the solidification of the production base in agriculture and adaptation to link with global and regional economy. Thailand has an obligation under the framework of multiple co-operations to take an appropriate step towards the ASEAN Economics Community (AEC) in 2015. Therefore, the establishment of human development and wisdom and learning society are in need. In addition, the strategic goals of the national policy on drug strategy 2011 and the development of national drug policy 2011-2016 aim for prevention and the improvement of healthcare standards to the public. Those embrace quality assurance, safety and effectiveness of drugs, promoting the rational use of drugs, promoting equitable access to medicines sustainably and promptly, creating pharmacovigilance system, and developing pharmaceutical industry for long self-sustainable. The National Health Security Office (NHSO), an organization under the supervision of the Ministry of Public Health, has main responsibility in the effective management of the National Health Security Fund. NHSO developed health service systems to assure that the public can access to the qualified services to accomplish the vision, said "Everyone who lives in Thailand is under the Universal Healthcare Coverage Scheme". A mission related to public health is to improve healthcare services under various health insurance schemes for quality standards that are accessible to everyone and satisfy to citizens and service providers.

However, considering the high cost of healthcare including the cost of medicines and medical supplies in Thailand, this could be caused by irrational drug use or the patient's non-adherence to treatments. Consequently, patients do not gain treatment benefits as it should be, or need to change treatment modalities or medications that commonly lead to higher medical expenses. Moreover, Thailand is entering to an aging society which this population needs cautions in drug use. Such problems can be prevented by health professional co-operation as multidisciplinary team. Fulfilling of this co-operation can improve the overall healthcare

standards in the public. The pharmacist, a key mechanism as drug expert in a multidisciplinary team, can take the role of clinical pharmacy into action.

Currently, the operational benchmarks for professional hospital pharmacy has been established for use as a guidance in pharmaceutical care or clinical pharmacy services for both governmental and private hospitals. Clinical pharmacy services have been designated as one of the standard professional pharmacist operations to support the roles of hospital pharmacists in patient care, which require skills and knowledges of clinical pharmacy-related activities. This was conducted in parallel with the development of hospital accreditation, one of the indicators used to certify hospital pharmacy services across the country. In order to comply with the philosophy of Mahidol University said, “True success is not in the learning, but in its application to the benefit of mankind”, the operations to achieve these objectives require skillful staff who can integrate knowledges in healthcare and social sciences effectively. Pharmacist who expertises in clinical pharmacy is considered as the priority, which is preferred by both the public and private organizations to foster success as mentioned above.

As a result of less skillful clinical pharmacists and low rate of pharmacists pursuing continuing education in clinical pharmacy, Faculty of Pharmacy Mahidol University, as the main entity responsible for administration of clinical pharmacy program, has updated its curriculum for Master of Science (M.Sc.) Program in Clinical Pharmacy (International program) according to the 12th National Economics and Social Development Plan (2017-2022), the national strategic plan on drug policy (2011), and the national drug system development strategy (2011-2016) with the aims to develop personnel working in both government and private healthcare organizations with high-level competency, proficiency, creativity, morality and ethics in pharmaceutical care, excellent communication skill and health-related technology, and be capable of developing applicable knowledge through clinical research that satisfy the users. In addition, such personnel can be able to prevent and solve healthcare problems by assuring quality, safety, and effectiveness of drugs, promoting rational drug use and equal, sustainable and timely access to essential medicine, creating effective surveillance mechanisms for drug utilization and facilitating development of pharmaceutical industry for sustainable self-reliance of the nation. Faculty of Pharmacy Mahidol University is ready in terms of faculty members, research materials and facilities, laboratory for clinical research, buildings and academic partners to support the M.Sc. program which in turn gear up national economics and help maximize the benefit of knowledge in clinical pharmacy for developing the country in the future.

### **Objectives:**

After completion their study, students will have characteristics which comply with Thailand Quality Framework standard as follows:

1. Possess moral, ethics and professional ethics, including ethics for human research and research code of conduct
2. Possess knowledge that is relevant to clinical pharmacy research and practice

3. Possess cognitive skills in searching, analyzing, synthesizing relevant information and effectively conducting research, and advance clinical pharmacy research and practice
4. Express opinions, be academic and professional leader, possess creative ideas, social responsibility, interpersonal and interactive skills
5. Possess appropriate communication skill and informative technology utilization for various groups in both academic and professional sectors along with ability to use information technology to analyze and present research data effectively

### Expected Learning Outcomes

On successful completion of the program students will be able to:

1. Apply knowledge on characteristics of diseases and pharmacotherapy principle.
2. Inter-relate pharmacotherapy principles to practice.
3. Analyze drug-related problems or disease problems, develop solutions and justify professional decisions.
4. Demonstrate moral, ethics and professional ethics in accordance to social norm and professional standard along with personal accountability in executing professional decisions, leadership, communication and application of knowledge and skills.
5. Appraise and critically evaluate published information and present it in written or oral format using appropriate information technology technique.
6. Conduct clinical pharmacy research.

### Course Synopsis & Methodology:

#### 1. Study plan:

Year	Semester 1			Semester 2		
1	PYCP 666	Pharmaceutical Care I Research	3(3-0-6)	PYCP 668	Clinical Pharmacy and Clerkship I	3(2-3-5)
	PYID 685	Methodology in Pharmacy I	2(2-0-4)	PYCP 648	Seminar in Clinical Pharmacy I	1(1-0-2)
		Elective Courses	6 credits		Elective Courses	6 credits
		<b>Total</b>	11 credits		<b>Total</b>	10 credits
2	PYCP 649	Seminar in Clinical Pharmacy II	1(1-0-2)	PYID 698	Thesis (continued)	6(0-18-0)
	PYCP 670	Special Problems in Clinical Pharmacy	2(0-6-2)			
	PYID 698	Thesis	6(0-18-0)			
		<b>Total</b>	9 credits		<b>Total</b>	6 credits

## 2. Course Content/Study Topic: Program Structure

### *Credit Requirements*

Credit requirements of the program were set according to the Ministry of Education Announcement titled “Standard Criteria for Graduate Studies 2005,” with specified plan 2 curriculum.

1. Required Courses	12 credits
2. Elective Courses (at least)	12 credits
3. Thesis	12 credits
<b>Total no less than</b>	<b>36 credits</b>

### *Required Courses*

<u>Course ID</u>	<u>Course Name</u>	<u>Credit(s)</u>
PYID 685	Research Methodology in Pharmacy I	2 (2-0-4)
PYCP 648	Seminar in Clinical Pharmacy I	1 (1-0-2)
PYCP 649	Seminar in Clinical Pharmacy II	1 (1-0-2)
PYCP 666	Pharmaceutical Care I	3 (3-0-6)
PYCP 668	Clinical Pharmacy and Clerkship I	3 (2-3-5)
PYCP 670	Special Problems in Clinical Pharmacy	2 (0-6-2)

### *Elective Courses*

Elective courses can be any graduate-level courses offered within Mahidol University or other universities with approval from the program director, major advisor, or program administrative committee. Listed below are examples of elective courses offered by the Faculty of Pharmacy, Mahidol University.

<u>Course ID</u>	<u>Course Name</u>	<u>Credit(s)</u>
GRID 603	Biostatistics	3 (3-0-6)
PYCP 627	Therapeutic Drug Monitoring	3 (3-0-6)
PYCP 644	Drug Information Service	2 (2-0-3)
PYCP 667	Pharmaceutical Care II	3 (3-0-6)
PYCP 669	Clinical Pharmacy and Clerkship II	3 (2-3-5)
PYCP 704	Rational Drug Use	2 (2-0-4)
PYCP 689	Pharmacotherapeutics in Geriatrics	2 (2-0-4)
PYCP 703	Pharmacovigilance	3 (3-0-6)

### *Thesis*

<u>Course ID</u>	<u>Course Name</u>	<u>Credit(s)</u>
PYCP 698	Thesis	12 (0-36-0)



**Applicants Qualifications:**

1. Degree holding and cumulative GPA
  - Graduated with a Bachelor Degree in Pharmacy or Doctor of Pharmacy (Pharm.D.) from programs accredited by the Office of Higher Education Commission (OHEC) with GPA of at least 3.50
2. Have an English proficiency test score as the requirement of Faculty of Graduate Studies
3. Other exceptions will be considered by the Program Director and the Dean of Faculty of Graduate Studies, Mahidol University.

**Document Required:**

1. Application form
2. Transcript
3. Certificate of English of proficiency
4. Statement of purpose and draft of thesis proposal

**Contacts:**

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E-mail: tipp@mfa.mail.go.th

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## Course Detail

### Master of Science Program in Regulatory Science for Pharmaceutical and Health Products (International Program)

<b>Course Title:</b>	Master of Science Program in Regulatory Science for Pharmaceutical and Health Products (International Program)
<b>Master Degree:</b>	Master of Science (Regulatory Science for Pharmaceutical and Health Products)
<b>Academic Institution:</b>	Faculty of Pharmacy, Departments of Microbiology, Pharmacy, Pharmaceutical Chemistry, Pharmacology and Manufacturing Pharmacy
<b>Duration:</b>	B.E. 2563-2565

#### Background and Rational:

Master of Science Program in Regulatory Science for Pharmaceutical and Health Products (International Program) is the first program in Thailand that offers body of knowledge as well as practical aspects in regulation of pharmaceutical and health products. The program is designed as integrated and multidisciplinary curriculum by collaborations of several departments including Pharmaceutical Chemistry, Pharmaceutical Manufacturing, Pharmacology, Microbiology and Pharmacy. The program involves both Thai and international regulations (EU, US, ASEAN and Japan) and complied with Thailand 4.0 policy. The program is driven by high caliber and high expertise faculty member. The learning process is designed as modules based on active learning, outcome based and problem based education. Lecture, laboratory, hand-on experiences as well as trainings in real sectors are provided for students. Students can get access to well-equipped laboratories, libraries and information technology facilities with necessary database. Research questions or thematic paper could be originated from students, which can be benefit to their future career and the graduates could pursue their careers in regulatory affairs in both governmental and private sectors. Upon the completion from the program, the graduates will be knowledgeable and skillful to work in the area of regulatory science in pharmaceutical and health products.

#### Objectives:

By the end of the study, students are able to

1. Possess moral, professional ethics and responsibility in the field of regulatory science for pharmaceutical and health products
2. Analyze and apply the knowledge in regulatory science for pharmaceutical and health products

3. Think critically, to analyze problems, to integrate and to synthesize knowledge in the field of regulatory science for pharmaceutical and health products

4. Have inter-personal skill with responsibility, management and leadership skills to effectively communicate and collaborate with intra- and inter-organizations in quality control of pharmaceutical and health products

5. Possess numerical and information technology skills required in regulatory science for pharmaceutical and health products

### Course Synopsis & Methodology:

#### 1. Study plan:

##### Plan B

Year	Semester 1	Semester 2
1	PYRS 500 Regulation of Drug and Health Products 3(3-0-6) PYRS 501 Management and Professional Skills in Regulatory Affairs 3(3-0-6) PYRS 504 International Approaches to Regulation 3(3-0-6) PYRS 505 Principles of Risk Management and Vigilance System for Health Products 2(2-0-4)	PYRS 502 Quality Management System and Quality Assurance 3(3-0-6) PYRS 507 Seminar in Regulatory Science II 1(1-0-2) PYRS 508 Process of Drug Discovery and Pharmaceutical Product Discovery and Pharmaceutical Product Development 3(3-0-6) Elective courses 6 credits PYRS 698 Thematic paper 2(0-18-0)
	PYRS 506 Seminar in Regulatory Science I 1(1-0-2) PYRS 503 Statistics in Regulatory Science for Pharmaceutical Products 3(3-0-6)	
	<b>Total 15 credits</b>	<b>Total 15 credits</b>
2	Elective courses 2 credits PYRS 698 Thematic paper 2(0-18-0) <b>Total 4 credits</b>	PYRS 698 Thematic paper 2(0-18-0) <b>Total 2 credits</b>

**2. Course Content/Study Topic:****Courses in the curriculum**

<b>(1) Required Courses</b>	<b>18 credits</b>
<b>(2) Elective Courses:</b> Not less than	12 credits
<b>(3) Thematic paper</b>	6 credits

**1) Required Courses 18 credits****Credits (Lecture-Practice-Self Study)**

PYRS 500	Regulation of Drug and Health Products	3(3-0-6)
PYRS 501	Management and Professional Skills in Regulatory Affairs	3(3-0-6)
PYRS 502	Quality Management System and Quality Assurance	3(3-0-6)
PYRS 503	Statistics in Regulatory Science for Pharmaceutical Products	3(3-0-6)
PYRS 504	International Approaches to Regulation	3(3-0-6)
PYRS 505	Principles of Risk Management and Vigilance System for Health Products	2(2-0-4)
PYRS 506	Seminar in Regulatory Science I	1(1-0-2)

**2) Elective Courses:** Not less than 12 credits**Credits (Lecture-Practice-Self Study)**

PYRS 507	Seminar in Regulatory Science II	1(1-0-2)
PYRS 508	Process of Drug Discovery and Pharmaceutical Product Development	3(3-0-6)
PYRS 509	Regulation of Biological Products	2(2-0-4)
PYRS 510	Risk Management Tools for Pharmaceutical Industry	2(2-0-4)
PYRS 511	Structure and Management of Clinical Trials	2(2-0-4)
PYRS 512	Intellectual Properties for Health Products	2(2-0-4)
PYRS 513	Pharmaceutical Commerce	2(2-0-4)
PYRS 514	Regulation of Food and Dietary Supplements	2(2-0-4)
PYRS 515	Regulatory of medical device	2(2-0-4)

In addition to elective courses mentioned above, a student may register other courses in international program offered by other faculties' equivalent to graduate studies, Mahidol University or the ones offered by other universities according to the student's interest with the approval of the curriculum committee or the advisor.

**Thematic paper**

	Credits (lecture – practice – self-study)
PYRS 697 Thematic paper	6(0-36-0)

## **Applicants Qualifications:**

### **Plan B**

1. Prospective students should hold a Bachelor's degree in the area of pharmacy or related health science from Institutions of Higher Education in Thailand or foreign countries accredited by the office of the Higher Education Commission with a minimum GPA of 2.50 or equivalent
2. Prospective students should have the English competency that meet the requirements of the Faculty of Graduate Studies, Mahidol University (e.g. TOEFL score of at least 400 or the total IELTS score of at least 3 or any other equivalent scores.
3. Prospective students should have experience in regulatory of health products at least one year.
4. Other exceptions may be considered by the Program Committee and the Dean of the Faculty of Graduate Studies, Mahidol University.

### **Document Required:**

1. Transcript
2. CV with a statement of purpose
3. TOEFL or IELST score

### **Contacts:**

1. Prof. Leena Suntornsuk  
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Faculty of Pharmacy, Mahidol University  
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### **Program staff:**

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## Course Detail

### Master of Primary Health Care Management Program (International program)

<b>Course Title:</b>	Master of Primary Health Care Management Program (International program)
<b>Master degree:</b>	Master of Primary Health Care Management
<b>Academic institute:</b>	ASEAN Institute for Health Development, Mahidol University
<b>Duration:</b>	August 2021-July 2022

#### **Background and Rational:**

Master of Primary Health Care Management degree program has been operated since the year 1986 with the cooperation between ASEAN Institute for Health Development (AIHD), Mahidol University. And Thailand International Cooperation Development Agency (TICA), Ministry of Foreign Affairs and the Japan International Cooperation Agency (JICA). The program emphasizes the development of managerial and leadership skills for medical and paramedical public health care professionals from all over the world, especially Asia. PHC development is recognized as an appropriate channel for public health service in the improvement of existing human resources, making use of appropriate technology, and encouraging community participation. Since 1986, AIHD has produced 700 graduates from 34 countries, currently working as PHC leaders with the common goals of efficient and effective health services and improvement in the quality of life.

#### **Objectives**

The curriculum prepares students to become leading public health professionals capable of addressing current primary health care and global health problems with multidisciplinary, evidence-based approaches.

#### **Course Synopsis and Methodology:**

##### **Study plan**

A minimum of 36 credits are required; require course 15 credits, elective course 9 credits, and thesis 12 credits.

<b>Semester 1</b>	<i>(August-December 2021)</i>	
	Require course	9 Credits
	Elective course	6 Credits

<b>Semester 2</b>	<i>(January-April 2022)</i>	
	Require course	6 Credits
	Elective course	3 Credits
	Thesis	6 Credits
<b>Summer</b>	<i>(April-July 2022)</i>	
	Thesis	6 Credits
<b>Total</b>		36 Credits

**Plan for master degree thesis**

<b>Thesis Process</b>	<b>Month</b>
Proposal development	September-January
Proposal exam	February
Data collection (Their home country)	April
Data analysis	May
Thesis writing	June
Thesis defense & Publication	July

**2. Course contents****Require course 15 Credits**

ADPM 602	Health Service and Primary Health Care Management	3 Credits
ADPM 603	Epidemiology for Primary Health Care Management	3 Credits
ADPM 622	Management of Environmental Health for Sustainable Development	3 Credits
ADPM 629	Research Methodology for Primary Health Care	3 Credits
ADPM 611	Health Promotion in Primary Health Care	2 Credits
ADPM 697	Thesis Seminar	1 Credits

**Elective course not less than 9 Credits**

ADPM 612	Leadership and Health Team Development	2 Credits
ADPM 613	Health Economics	2 Credits
ADPM 614	Primary Health Care and Global Health	2 Credits
ADPM 615	Professional Training Management in Primary Health Care	2 Credits
ADPM 619	Field Study	2 Credits
ADPM 631	Strategic Purchasing for Universal Health Coverage	2 Credits
ADPM 632	Health Providers in Health Systems	2 Credits
ADPM 633	Health Financing for Social Health Protection	2 Credits
ADPM 634	Health Economics	2 Credits
ADPM 636	Socio-economic and Cultural Perspective in Health	2 Credits
ADPM 638	Health Communication for Primary Health Care Management	2 Credits
ADPM 639	Health Systems Policies	2 Credits
ADPM 656	Applied Statistics for Health Science Research	3 Credits
ADPM 695	Sufficiency Economy Philosophy for Primary Health Care Management	2 Credits
ADPM 696	Principle Concept and Practice of One Health	2 Credits



ADPM 698 Thesis

12 Credits

**Grand Total:** not less than 36 Credits**Graduate requirements:**

- For graduates with a bachelor degree admission to master degree, the course of time throughout must not exceed 5 years.
- Complete the coursework for not less than 24 credits and 12 credits for thesis, with minimum total of 36 credits and must have a minimum cumulative grade point average of 3.00.
- Must pass the English proficiency examination for graduates of Mahidol University or IELTS/TOEFL equivalent.
- Must pass the soft skills graduates of Mahidol University
- Must pass the thesis examination and submit the thesis following the regulations of the Faculty of Graduate Studies.
- A document indicated published or accepted for publication in an peer-reviewed international conference proceeding or journal according to the Faculty of Graduate Studies requirement

**Application qualifications:**

All applicants must fulfill the following:

- Graduated with a degree in medicine and health related field
- Grade point average > 2.50 or > 75 per cent
- Good command of English (TOEFL score of 500 and above or IELTS score with a minimum of 5)
- If an applicant does not meet the above criteria but has other suitable qualifications and experience, s/he may be considered to apply for admission by the program committee

**Document require for admission:**

- Academic transcript
- English proficiency certificate
- Curriculum Vitae
- A recommendation letter
- A draft of research project to be conducted as master degree thesis

**Contact:****1. Contact: Program director****Asst. Prof. Dr. Phudit Tejativaddhana**

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**2. Program coordinator**

**Ms. Chatchata Ruangkachorn**

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Email: Chatchata.rua@mahidol.edu

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E-mail: tipp@mfa.mail.go.th

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### **Course Detail**

#### **Master of Science in Occupational and Environmental Health (International Program)**

<b>Course Title:</b>	Master of Science (Occupational and Environmental Health) (International Programme)
<b>Master Degree:</b>	Master of Science (Occupational and Environmental Health) M.Sc. (Occupational and Environmental Health)
<b>Academic Institution:</b>	Faculty of Public Health, Thammasat University
<b>Duration:</b>	18 months (minimum)

#### **Background and Rational**

This course aims to produce researchers with special skills in these areas equipped with up-to-date knowledge of relevant technological innovations. There is comprehensive coverage of theory and practice and an emphasis on the development of research skills enabling students to apply their knowledge to find practical solutions to real public health issues.

The M.Sc. provides the necessary skills, knowledge, and competencies to enable students to critically evaluate risk posed by the full range of occupational and environmental health hazards, or stressors, which have impacts on human health and well-being. Courses will be delivered by academic staff with wide practical experience as well as active research interests.

The course is conducted using a practically-based teaching and learning processes including lectures, workshops, group work, case studies, practical assignments, site visits, and student centered learning. This ensures graduates to gain experience on the challenge of current problem-based research and state of the art methods.

This program offers several specialized subjects in three fields; occupational health, ergonomics, and safety and environmental health. It will be conducted in a semester system with 36 credits in total. For the first two semesters, students focus on core compulsory courses and scientific topics related to their selected fields of study. Elective courses complement the core courses and their interested research topics.

#### **Objective:**

The M.Sc. (Occupational and Environmental Health) provides graduates with: 1) developing technical competence necessary to successful academic and professional work; 2) acquiring and integrating knowledge and skills from a variety of occupational and environmental health perspectives in order to become effective problem solvers, innovators, and decision makers; and 3) mastering the knowledge and practice in occupational and environmental health through the process of research and field practice.

**STUDY PLAN****Course Content/Study Topic:***a. Pre-program workshop*

FIRST YEAR	
<b>Plan A (Thesis Track)</b>	
<b>First semester</b>	
OE60 Statistics and Research Methodology 1	3 credits
OE61 Occupational and Environmental Epidemiology 1	3 credits
OE63 Occupational and Environmental Health 1	3 credits
OE66 Occupational and Environmental Health Seminar (non-credit) 1	1 credit
OE6x Compulsory in concentration x	3 credits
<b>Total</b>	<b>13 Credits</b>
<b>Second semester</b>	
OE6x Compulsory in concentration x	3 credits
OE6x Compulsory in concentration x	3 credits
OE6x Electives x	3 credits
OE6x Electives x	3 credits
OE80 Thesis 0	3 credits
<b>Total</b>	<b>15 credits</b>
SECOND YEAR	
<b>First semester</b>	
OE80 Thesis 0	9 credits
<b>Total</b>	<b>9 credits</b>

Although the pre-program workshop is considered as a non-credit co-curricular learning experience, all enrolled students are expected to participate prior to registration in the 1<sup>st</sup> semester of the academic year.

*b. Core compulsory courses*

Students must complete a total of 9 credits and Occupational and Environmental Health Seminar (credit not counted) of the following Occupational and Environmental Health core courses:

OE 611: Occupational and Environmental Epidemiology	3 (3-0-9)	Credits
OE 601: Statistics and Research Methodology	3 (3-0-9)	Credits
OE 631: Occupational and Environmental Health	3 (3-0-9)	Credits

**Compulsory course (credit not counted)**

OE 661: Occupational and Environmental Health Seminar 1 (0-2-4) Credits

**c. Compulsory in field courses**

Students must complete a total of 9 credits of the following compulsory courses:

**Concentration on Occupational Health**

OE 621: Occupational and Environmental Toxicology 3 (3-0-9) Credits

OE 632: Occupational and Environmental Sampling and Analysis  
3 (2-3-7) Credits

OE 633: Workplace Exposure Assessment and Control 3 (3-0-9) Credits

**Concentration on Environmental Health**

OE 621: Occupational and Environmental Toxicology 3 (3-0-9) Credits

OE 632: Occupational and Environmental Sampling and Analysis  
3 (2-3-7) Credits

OE 651 Environmental Health Technology 3 (3-0-9) Credits

**d. Elective courses**

Plan-A: Students opting for Plan-A must select at least 6 credits of coursework from either minor concentration courses or the following set of free electives courses.

OE 602 : Advanced Statistics for Occupational and Environmental Health  
Research 3 (3-0-9)  
Credits

OE 612 Molecular Epidemiology 3 (3-0-9) Credits

OE 634 Risk Assessment and Management 3 (3-0-9)  
Credits

OE 635 Air Pollution and Control 3 (3-0-9) Credits

OE 636 Indoor Air Quality and Control 3 (3-0-9) Credits

OE 641 Safety Engineering 3 (3-0-9) Credits

OE 642 Safety, Health and Environmental Management 3 (3-0-9) Credits

OE 643 Human Factors and Ergonomics 3 (3-0-9) Credits

OE 644 Task Analysis and Design 3 (3-0-9) Credits

OE 652 Environmental and Health Impact Assessment 3 (3-0-9) Credits

OE 653 Waste Management 3 (3-0-9) Credits

OE 654 Water and Waste Water management 3 (3-0-9) Credits

OE 655 Disaster Management 3 (3-0-9) Credits

Thesis (Plan-A)

OE 800: Thesis 12

Credits

**Application and Qualification :**

- Hold a B.Sc. or equivalent fields and must have taken at least 2 of the following courses: Chemistry and Analytical Chemistry, Biology, Industrial Hygiene, Occupational Health and Safety, Environmental Health, Toxicology and Statistics.
- Have a minimum grade point average of 2.75

- Have a proven minimum of two years professional experience in Occupational Health and Safety or Environmental Health.
- Minimum TOEFL score of 500 (paper-based) or 173 (computer-based) or IELTS not less than 6.0 or TU-GET not less than 500.
- For all non-native speakers, proven English language proficiency is a precondition for program enrolment.

**Document Required:**

- Completed application form
- Copy of degree certificates
- Copy of degree transcripts
- Copy of TUGET or TOEFL or IELTS test score sheet
- Copy of valid passport
- Letter of reference
- Medical certificate
- Concept paper

**Contact:**

Faculty of Public Health, Thammasat University  
Office: 02-564-4440-79 ext. 7426  
Fax: 02-516-2708  
Email: [qip-admissions@fph.tu.ac.th](mailto:qip-admissions@fph.tu.ac.th)  
Website: <http://fph.tu.ac.th/en/master-phd>

**Coordinators**

Ms. Sirada Sahaimitr  
Ms. Prapaporn Pansuwan

**For more information:**

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## Course Detail

### Master of Sciences in Public Health Sciences

<b>Course Title:</b>	Master of Sciences in Public Health Sciences
<b>Master Degree:</b>	Master of Sciences (M.Sc. in Public Health Sciences)
<b>Academic Institution:</b>	College of Public Health Sciences, Chulalongkorn University
<b>Duration:</b>	August 2021 – July 2023 (2Years)

#### **Background and Rational:**

Health issues are fundamental to quality of life. That links to other matters of the people and society This world society and the future is a knowledge-based society. (Knowledge-based Society) Society is therefore very demanding of knowledge. To come and deal with the problem Social needs It is an incentive for senior academics in health to drive Always keen to invent new knowledge The Public Health Science Program aims to produce international scholars with the potential to independently acquire knowledge through scientific research methods. To develop the body of knowledge in the field of public health science, Especially in the field of herbal science and biomolecular technology in key national and regional issues. The curriculum is of great interest and in high demand by relevant scholars nationally, regionally and internationally By offering specialties in Public Health Sciences the Semester-based program provides a variety of types and duration of study to respond to students' needs as follow:

#### **Herbal Sciences (plants, animals or minerals)**

Extraction, isolation or purification of natural products from medicinal plants or some microorganisms. Chemistry of essential oils and their therapeutic effects.  
Standardization of herbal drugs. Biological activities and underlying mechanisms of medicinal plants. Development of natural product-based medicines

#### **Biomolecular technology**

- In vitro cultivation and drug susceptibility test of malaria parasites.
- DNA analysis and gene mutations by using molecular techniques
- Gene diversity

#### **Protein modifications**

- Developing new bioconjugation techniques based on organic chemistry.
- Using some modified biomolecules for in vitro or in vivo studies.

**Objectives:**

1. To produce competent Master's both academically and research Become scholars and practitioners with the potential to independently pursue knowledge. Able to develop knowledge in the field of public health science Herbal Science Or the field of molecular technology

2. To develop research in public health science Herbal Science Or the field of molecular technology That can be applied to be applied to solve public health problems at the national, regional and international levels.

3. To develop academic studies in public health science, herbal science and biomolecular technology.

**Course Synopsis and Methodology:****Curriculum Plan**

Course	Plan A2 (Credits)
Core Courses of public health	10
Major Compulsory Courses	3
Elective Courses	11
Thesis	12
<b>Total (Credits)</b>	<b>36</b>

**Study plan**

1 <sup>st</sup> Semester	2 <sup>nd</sup> Semester	3 <sup>rd</sup> Semester	4 <sup>th</sup> Semester
Aug – Dec 2021	Jan – Jun 2022	Aug – Dec 2022	Jan – Jun 2023
<u>Core courses</u> <b>Seminar in Public Health Sciences I (C-1)</b> ❖ Analytical Technology in Public Health Sciences (C-3) ❖ Research Fundamental in Public Health Sciences (C -3)	<u>Core courses</u> ❖ Seminar in Public Health Sciences II (C-1) <u>Elective courses</u> ❖ Special Problems in Public Health Sciences II (E -2 ) ❖ Elective (E- 6)	❖ <b>Thesis /Lab research</b> ❖ Proposal Exam ❖ <b>Academic conference presentation</b> ❖ <b>Article publication</b>	❖ Thesis Exam
<u>Elective courses</u> ❖ Special Problems in	<b>Specific courses due to area of interest (selected)</b>		



<b>Public Health Sciences I (E – 2)</b>	❖ <b>Application of Medicinal Plant Research II</b>		
❖ <b>Elective (E- 6) Specific courses due to area of interest (selected)</b> ❖ <b>Application of Medicinal Plant Research I</b> ❖ <b>Applied Molecular Biology Techniques in Public Health Sciences</b>	❖ <b>Traditional Medicine in Health Sciences I</b> ❖ <b>Current Research Topics in Biomolecular Technology</b>		

### Thesis Research Plan

- Summited Proposal Request within May
- Proposal Exam within June
- Laboratory During July to February
- Interplead Data within April
- Thesis Exam within May
- Summited full paper within July

### Course Content

Code	Course	Credit
5300709	Special Problems in Public Health Sciences I SP PROB PBHLTH I Preliminary research project assigned by the advisor leading to the thesis.	2 (1-3-4)
5300710**	Special Problems in Public Health Sciences II SP PROB PBHLTH II Preliminary research project assigned by the advisor leading to the thesis.	2 (1-3-4)
5300711**	Seminar in Public Health Sciences I SEM PBHLTH I Literature review; information gathering; scientific reading skill; scientific presentation skill.	1 (1-0-3)

5300712	Seminar in Public Health Sciences II SEM PBHLTH II Systematically reading and evaluating scientific papers; scientific presentation and discussion skill.	1 (1-0-3)
5300727	Standardization of Medicinal Plants STD MED PL Principles of qualitative and quantitative standardization of medicinal plants including macroscopic and microscopic analyses of crude drugs, physicochemical properties.	2 (2-0-6)
5300750	Biomolecular Technology in Malaria BIOMOL TECH MAL Cellular and particle structures and functions of cells, basic knowledge of their genetic materials, genes and gene regulation, the way to collect these samples and their cultivation, basic molecular biology techniques which may be used to study living organisms, using malaria as a case study, ethical issues.	3 (3-0-9)
5300751	Application of Medicinal Plant Research I APP MED PL RES I Principles and system of classification, nomenclature and identification of medicinal plants from the morphology, habitat, phylogeny, microscopic structure, chemical composition and biological activity, principles of molecular genetics and application of the concepts and scientific methods in medicinal plant research.	3 (2-3-7)
5300752	Application of Medicinal Plant Research II APP MED PL RES II Preclinical research methodology, clinical trial and socio-medical sciences in Thai traditional medicine, genomic, proteomic and metabolomic application in medicinal plants research.	3 (2-3-7)
5300753	DNA-Based Technology in Medicinal Plant Research DNA MED PL RES Principle and concept in molecular genetics, structures, functions and properties of genes in the molecular level, DNA recombination and the application of DNA-based technology, the use of bioinformatics for searching and analyzing information from the bio-information database from medicinal plant and herb researches.	3 (2-3-7)

5300754**	Analytical Technology in Public Health Sciences Research ANAL TECH PBHLTH Fundamental and advance laboratory techniques for biological, physiochemical and molecular analysis, knowledge and practical skills experience relevant to research in Public Health Sciences.	3 (2-3-7)
5300755	Applied Molecular Biology Techniques in Public Health Sciences APP MOL PBHLTH Principle of the selected basic molecular biology techniques, practice in laboratory and its application to public health sciences research.	3 (2-3-7)
5300756	Current Research Topics in Biomolecular Technology CURR RES BIOMOL Modern molecular technologies; analyzing, presenting and commenting articles from high quality journals.	3 (2-3-7)
5300757**	Research Fundamental in Public Health Sciences RES FUND PBHLTH Preclinical research methods, clinical research methods, animal models, ethical consideration.	3 (2-3-7)
5300758	Traditional Medicine in Health Sciences I TRAD MED HLTH SC I Medicinal properties in traditional medicine, in vitro scientific biological activities, application in health sciences	3 (2-3-7)
5300759	Traditional Medicine in Health Sciences II TRAD MED HLTH SC II Medicinal properties in traditional medicine, in vivo scientific biological activities, clinical research, application in health sciences	3 (2-3-7)
5300811	THESIS	12 credits

**Graduation Conditions:**

- Pass Standard of English (CUTEP 45 / IELTS 4.5 / TOEFL 450)
- Pass Proposal & Thesis Examination
- 1 international Publication or Proceeding
- Submitted Full paper & CU I Thesis to Graduate School
- Completed Register of Graduation

**Applicant Qualifications:**

An interested person with good command of English and bachelor degree in Related fields

**Document Required:**

**- Application form of TICA**

<http://tica.thaigov.net/main/en/relation/75500-TIPP-Application-form.html>

- Transcript

- Recommendation Letter

- English Test

- **CU-TEP 45**

- **IELTS 4.5**

- **TOEFL 450**

- **Certify document Graduated from University where certify by OCSC  
or Study in English Official Language Country**

**- Application form of Chula**

<http://www.cphs.chula.ac.th/index.php/component/phocadownload/file/298-application-form>

- **Statement of purpose and area(s) of interest (1 page)**

- **A copy of your identification document (Passport).**

**Contact:**

**Scholarship Coordinator :** Mr. Poohmerat Kokilakanishtha (Pooh)

**Mobile:** 66892552395 **email:** Poohmerat.k@chula.ac.th/ Poohmerat@gmail.com

**Director, Academic Administrative Section :** Ms. Sukarin Wimuktayon (L)

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**For more information:**

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\*\*\*The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.

## Course Detail

### Master of Arts Program in Asia Pacific Studies (International Program)

<b>Course Title:</b>	Master of Arts Program in Asia Pacific Studies (International Program)
<b>Master Degree:</b>	Master of Arts (Asia Pacific Studies)
<b>Academic Institution:</b>	Thammasat Institute of Area Studies (TIARA), Thammasat University
<b>Duration:</b>	18 months (August 2021 - January 2023) 3 semesters + 1 summer semester

#### Background and Rational:

Master of Arts in Asia-Pacific Studies (MAPS) Program is an interdisciplinary graduate program that is designed for internationally – focused students who wish to obtain an in-depth understanding of the Asia-Pacific region through multi-faceted and inter-disciplinary lenses.

MAPS is the first graduate program in Thailand which examines the entire Asia-Pacific region in all its complexities. The Asia-Pacific region is one of the most dynamic and diverse regions in the world. It is the home of more than 4.3 billion people and accounts for more than half of global economic activities. Trade and development have given rise to international economic cooperation, ranging from small regional forums to large-scale collaborations such as APEC (Asia-Pacific Economic Cooperation) and ASEAN.

MAPS program provides students with the opportunity to deepen their knowledge not only on the said academic disciplines. Students will also study various contemporary issues related to sustainable development in the region. The program adopts multidisciplinary approach that allows them to integrate study of economics, law, international relations, and public policies to give students an understanding of contemporary regional issues. These issues are directly related to the following **Sustainable Development Goals**: Goal 2 (Zero hunger), Goal 4 (Quality education), Goal 5 (Gender equality), Goal 8 (Decent work and economic growth), Goal 9 (Industry, innovation and infrastructure), Goal 10 (Reduced inequalities) and Goal 13 (Climate change).

The Asia-Pacific region is also the home of 700 million youth whose ambitions and abilities can contribute to the prosperous, peaceful, and sustainable future of the region. Investing in youth is an investment for the future. Our students will be trained and empowered for a sustainable future that requires a better understanding of their needs, interests, challenges, and potential may it be domestically or internationally.

MAPS is a truly international program with more than 80 per cent of international students. Students at MAPS program come from ASEAN member states and countries in the Asia-Pacific such as Bhutan, Japan, and China. The majority of them works in public and higher education sectors, that is, civil service officers at Ministry of Foreign Affairs and university lecturers. When they graduate, they will go back and become the driving force for sustainable developments in their counties.

Followings are examples of the Thesis studies by MAPS graduates. These theses are related to SDGs Goal.

- **Goal 2—Zero hunger:** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
  - The Evaluation of Japanese ODA to Vietnamese Farmers
  - Effects of Agricultural Policies on Rice Industry in Myanmar

- **Goal 4—Quality education:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
  - Education Reform in Myanmar: A Case of Two Technological Universities
- **Goal 5—Gender equality:** Achieve gender equality and empower all women and girls.
  - Study on the Role of Entrepreneurship in the Textile Sector Industry in Bhutan
  - Women and Career Advancement in Brunei Darussalam: A Case Study of Women Working in Brunei Darussalam Government Sectors
- **Goal 8—Decent work and economic growth:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
  - Community- based Tourism in Creating Impacts for Rural Communities: A Case Studies Nglanggeran Tourist Village in Yogyakarta, Indonesia
  - Challenges Faced by Brunei’s Micro and Small Entrepreneurs on the Utilization of Social Media as Online Marketing
  - The Effect of the Royal Decree on Managing the Work of Aliens B.E. 2560 (2017) on Myanmar Migrant Workers in Factories: Case Study of Four Selected Companies in Samut Sakhon Province
  - Factors Affecting Foreign Direct Investment (FDI Inflows to Lao PDR
  - Factors Attracting Investors to Invest in Laos: Case Study of Savan Seno Special Economic Zone
  - Corporate Social Responsibility in Vietnam State-owned Enterprises: A Comparative Analysis of PVEP and VTC
  - The Influence of Government Policy on the Return of Overseas Vietnamese in the Information and Communication Technology Sector
- **Goal 9—Industry, innovation and infrastructure:** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
  - Determinant Factors of Tuna Canneries Performance in Indonesia and Thailand: A Comparative Perspective
  - Analysis of the Effect of the Trans-Pacific Partnership Free Trade Agreement on the Vietnamese Apparel Industry
- **Goal 10—Reduced inequalities:** Reduce inequality in and among countries.
  - Refugee Status Determination (RSD) Practices in Thailand
  - Inequality and Economic Development in Lao PDR since the 1986 Economic Reform
- **Goal 13—Climate change:** Take urgent action to combat climate change and its impacts.
  - Disaster Management in Cambodia: Community- based Disaster Risk Management in the Case of Drought in Oral District

MAPS program allows the exchange of first-hand knowledge and experiences from international students particularly from APEC and ASEAN member countries. After graduation, graduates are equipped with knowledge of situations, phenomena, contemporary issues, and sustainable development in the Asia-Pacific region which can be applied to their careers in the public sector, diplomatic service, academic consultancies, international organizations, and sustainable development related career domestically and internationally.

MAPS Program are offered and administered by Thammasat Institute of Area Studies or TIARA at Thammasat University. TIARA starts off from a single center namely Thai APEC Study Center which works to foster research and academic discussions supporting the broader APEC mission of regional economic integration and a means to building networks of academic professionals

in the region. TIARA has developed not only experience, but it also extends in term of networks, collaborations, academic exchanges and many more. At present, TIARA is a home to five Area Studies Centers – Thai APEC Study Center, the Australian Studies Centre, India Studies Center, Russia and CIS Study Center, and the ASEAN Study Center. These centers have their own academic focuses and networks. This gives TIARA more resources and room to do academic activities within the context of ‘Area Studies’ and not limited to country or regional studies. For that reasons, TIARA becomes the institution with expertise in conducting academic and policy research, organizing seminars, trainings, workshops, and international conferences on issues in the Asia-Pacific region. Our knowledge and expertise have been continuously building up since the year 2000.

With its networks in Thailand and around the world, TIARA utilizes all resources and networks to benefit MAPS program. The program regularly welcomes visiting professors and guest lecturers as well as experts in the field to teach our students especially those institutes that signed MOUs with TIARA. These become a unique characteristic and strong point of the program in terms of teaching and research making MAPS a quality program that produce international standard quality graduates to fulfill MAPS’s mission and vision, that is, to provide high quality graduate education, academic resources, training and professional developments as well as foster cultural learning and exchanging opportunities for graduate students and professional in the intellectual diverse environment.

The MAPS curriculum emphasizes interdisciplinary studies from professors, scholars, and professionals with high expertise in their fields. Students will learn to look deeper into topics from all aspects and perspectives, foster critical thinking and analytical ideas including to tackle topics from new directions, which will transform into a lifelong learning. Please see an attachment named List of MAPS Guest Lecturers for your reference.

In addition to our human resources, MAPS had its own facilities. MAPS students are given the access to a dedicated research and study space to help fostering intellectual exchange and collaboration beyond the classroom.

1. Asia-Pacific Resource Center – the Resource Center, as our students called it, houses a relevant and accessible collection of Asia-Pacific related resource materials. The center provides space for information and cultural exhibition as well as acquired information and dissemination manuals, information and research about countries in the Asia-Pacific region. The center also provides modern, adequate, and efficient information center services, appropriate and comfortable learning environment on the use of resources for individual and group study for individual and group study.

2. MAPS Common Room – MAPS Common Room located at the 1<sup>st</sup> Floor of the Social Science Complex next to the Asia-Pacific Resource Center, is designed specially for MAPS students. It is primary space for students to hang out – whether for work on project or to spend time with each other. The MAPS Common Room is created with comfortable and welcoming environment features wireless internet access and lockers for student use. MAPS Common Room is divided into three Zones with different functions; 1 small classroom seated classroom style with the capacity of 40 people, 2 rooms with flexible furniture configuration with capacity for 20 people for group gathering or informal group meeting.

3. MAPS Classroom – a small fully equipped classroom with capacity for 20-25 students

4. MAPS co-working space – located in front of MAPS Classroom with capacity for 20-25 students

For more information about MAPS Program, course syllabus, and other related matters, please see an attachment named Introduction to MAPS Program |

Previous record of the graduation of students under MAPS Program are shown in the Table below.

Academic Year	Total number of Students	Total number of Students who graduated	%
2015	13	12	93
2016	17	13	77
2017	12	11	92

### Objectives:

Master of Arts in Asia- Pacific Program aims to prepare students for future challenges in sustainable manners and integrate knowledge of international economics, international relations, and international laws to the sustainable development as well as to promote sustainability mindset and encourage students and graduates to play their roles in fulfilling UN' SDG Goals, may it be in the domestic or international arena.

### Course Synopsis and Methodology:

#### Program Information

Program Length	18 months full-time/ 3 full semesters and 1 summer semester
Medium of Instruction	English Language
Class Size	20
Campus	Most courses are taught at Rangsit Center
Facilities	Asia-Pacific Resource Center and MAPS Common Room. Students will be given the access to dedicated research and study space to help foster intellectual exchange and collaboration beyond the classroom

#### Program Plan

Plan A	Credit	Plan B	Credit
Required courses	21	Required courses	21
Elective Courses	6	Elective Courses	12
Thesis	12	Independent Studies	6
Thesis Defense	-	Written Comprehensive Exam	-
Postgraduate International Conference (TU-CAPS)	-	Postgraduate International Conference (TU-CAPS)	-
<b>Total</b>	<b>39</b>	<b>Total</b>	<b>39</b>

#### Plan A

#### Semester 1 Year 1: 4 Subjects 12 credits

APS600	Foundation Asia-Pacific Studies	3 credits
APS612	Economic Development in ASEAN	3 credits
APS621	Political, Security, and Defense Strategies in the Asia-Pacific Region	3 credits



APS6xx	Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region	3 credits
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**Semester 2 Year 1: 4 Subjects 12 credits**

APS611	Economic Integration in the Asia-Pacific Region	3 credits
APS631	International Law and Regional Architecture in the Asia-Pacific Region	3 credits
APS681	Research Methodology	3 credits
APS6xx	Elective Core Course: choose between Contemporary Issues in the Asia-Pacific Studies/ Public Policy Studies	3 credits

**Summer Semester: 1 Subject 3 credits**

APS800	Thesis	3 credits
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**Semester 1 Year 2: 2 Subjects 12 credits**

APS6xx	Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region	3 credits
APS800	Thesis	9 credits

**Plan B****Semester 1 Year 1: 4 Subjects 12 credits**

APS600	Foundation Asia-Pacific Studies	3 credits
APS612	Economic Development in ASEAN	3 credits
APS621	Political, Security, and Defense Strategies in the Asia-Pacific Region	3 credits
APS6xx	Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region	3 credits

**Semester 2 Year 1: 4 Subjects 12 credits**

APS611	Economic Integration in the Asia-Pacific Region	3 credits
APS631	International Law and Regional Architecture in the Asia-Pacific Region	3 credits
APS681	Research Methodology	3 credits
APS6xx	Elective Core Course: choose between Contemporary Issues in the Asia-Pacific Studies/ Public Policy Studies	3 credits

**Summer Semester: 1 Subjects 3 credits**

APS6xx	Elective Course: Selected Topics in Asia-Pacific Studies (Countries Studies)	3 credits
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**Semester 1 Year 2: 2 Subjects 6 credits**

APS6xx	Elective Course: between Comparative Politics and Governments in the Asia-Pacific Region/ International Relations and Foreign Policy in the Asia-Pacific Region	3 credits
APS6xx	Elective Course:	3 credits

**Semester 2 Year 2: 1 Subject 6 credits**

APS6xx	Independent Studies	6 credits
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**Applicants Qualifications:**

- A bachelor's degree in any field with a cumulative GPA of 2.5 and above from an accredited university. For those who wish to apply for a scholarship, applicants should at least have a cumulative GPA of 3.00 with an above average grade on the relevant subjects.
- Requirement for English Proficiency

No.	English requirements	Minimum score
1	Paper based TOEFL	550
2	Computer-based TOEFL	213
3	Internet-based TOEFL	79
4	International English language Testing System (IELTS)	6.5
5	Thammasat University Graduate English Test (TU-GET)	550
6	Thammasat University Graduate English Test (TU-GET) CBT	550

- Applicants can be accepted with conditions in the case of
  - IELTS:  $6.5 \geq 5.0$
  - TOEFL:  $550 \geq 400$
  - TU-GETS:  $550 \geq 350$
- Applicants who cannot meet the minimum score of the above can reply to the program and submit the required score to the university before the registration day. English test results must not exceed 2 years by the time the applicants submit the results to the university.
- Test results submitted with the admission application are valid evidence for graduation.
- Please note that Thammasat University requires all students who have not submitted their English Proficiency Test Score to meet the minimum requirement score to submit their Official English Proficiency Test score before the final Thesis defense
- 4<sup>th</sup> year bachelor students who expect to graduate may apply by submitting a certified letter of expected date of graduation.
- Complete applications and submitting all required documents.
- As one of graduate requirement from Thammasat University, graduate students are required to present their thesis work at the International Conference. MAPS students are entitled to present their works at TU-CAPS, the annual international conference hosted by Thammasat Institute of Area Studies, Thammasat University.

**Document Required:**

- Completed Online Application Form (at [www.maps-tu.org](http://www.maps-tu.org))
- Official Academic Transcript (English version only)
- Statement of Purpose (as appear in Online Application Form)
- Proof of English Language Proficiency (IELTS, TOEFL, TU-GETS)
- Two letters of Reference
- Copy of Passport
- ID Photo (Passport size)
- Other additional supporting documents an applicant may want to submit such as certificates of training, letter of employment, etc.

**Contact:**

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Director of Thammasat Institute of Area Studies (TIARA)  
Address: Thammasat Institute of Area Studies (TIARA)  
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Tel: 02-564-3129  
Mobile: 081-487-3339  
Email: [suphat@econ.tu.ac.th](mailto:suphat@econ.tu.ac.th)

**Programme Coordinator:**

Mrs. Nuchanat Suparongnithipat  
MAPS Program Coordinator  
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Dome Administrative Building, Thammasat University (Rangsit Campus)  
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Tel: 02-564-3129  
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## **Course Detail**

### **Master of Arts Program in Diplomacy and International Studies (International Program)**

<b>Course Title:</b>	Master of Arts Program in Diplomacy and International Studies (International Program)
<b>Master Degree:</b>	Master of Arts (Diplomacy and International Studies)
<b>Academic Institution:</b>	The Institute of Diplomacy and International Studies (IDIS), school of Politics, Economics, and Globalization, Rangsit University
<b>Duration:</b>	2 Years (August 2021 – July 2023)

#### **Background and Rational**

IDIS was established on 22 of March, 2006, with an aim to meet the challenge of globalization and the increasing demand for world-class professionals in International affairs in Thailand and the Asian region.

DIS with its multi-disciplinary approach, became the first institute of its kind in Southeast Asia. The establishment of DIS is an important step in the implementation of Rangsit University's Road Map to excellence strategy, which created qualified graduates for the region and the world at large.

#### **Objective:**

Many career opportunities are open to IDIS graduates, especially in Southeast Asia and broader Asia where there is significant demand for graduates knowledgeable in politics, international relations and development studies. Opportunities include positions in government ministries, international organizations, non-governmental organizations, think tanks, the media, international businesses and educational institutions. To increase their opportunities many of our undergraduate students progress to postgraduate study at IDIS or at other universities across the globe.

**Course Synopsis and Methodology:**

Master of Arts Program in Diplomacy and International Studies (International Program)

**1<sup>st</sup> Year**

<b>PLAN A</b> <b>(Academic subjects, and Thesis)</b>	<b>PIAN B</b> <b>(Academic subjects, and Interdepend Studies)</b>
<p><b>Semister 1</b></p> <p>IDS 603 International Politics and Security 3(3-0-6)</p> <p>IDS 604 International Law and International 3(3-0-6)</p> <p>IDS 605 International Economics and 3(3-0-6) International Business</p> <p style="text-align: right;">Total 9 credits</p>	<p><b>Semister 1</b></p> <p>IDS 603 International Politics and Security 3(3-0-6)</p> <p>IDS 604 International Law and International 3(3-0-6)</p> <p>IDS 605 International Economics and 3(3-0-6) International Business</p> <p style="text-align: right;">Total 9 credits</p>
<p><b>Semister 2</b></p> <p>IDS 606 Global Perspectives on Public 3(3-0-6) Diplomacy</p> <p>IDS 607 Negotiations and conflict 3(3-0-6) resolution</p> <p>IDS 608 Political Economy of Asia 3(3-0-6)</p> <p style="text-align: right;">Total 9 credits</p>	<p><b>Semister 2</b></p> <p>IDS 606 Global Perspectives on Public 3(3-0-6) Diplomacy</p> <p>IDS 607 Negotiations and conflict 3(3-0-6) resolution</p> <p>IDS 608 Political Economy of Asia 3(3-0-6)</p> <p style="text-align: right;">Total 9 credits</p>

2<sup>nd</sup> Year

<b>PLAN A</b> <b>(Academic subjects, and Thesis)</b>	<b>PIAN B</b> <b>(Academic subjects, and Interdepend Studies)</b>
<p><b>Semister 1</b></p> <p>IDS 609 ASEAN Integration 3(3-0-6)</p> <p>IDS 661 Research Methodology 3(3-0-6)</p> <p>IDS 699 Thesis 3(0-6-3)</p> <p style="text-align: right;">Total 9 credits</p>	<p><b>Semister 1</b></p> <p>IDS 609 ASEAN Integration 3(3-0-6)</p> <p>IDS 661 Research Methodology 3(3-0-6)</p> <p>IDS xxx Elective 3(x-x-x)</p> <p style="text-align: right;">Total 9 credits</p>
<p><b>Semister 2</b></p> <p>IDS 699 Thesis 9(0-18-9)</p> <p style="text-align: right;">Total 9 credits</p> <p style="text-align: center;"><b>Total 36 Credits</b></p>	<p><b>Semister 2</b></p> <p>IDS xxx Elective 3(x-x-x)</p> <p>IDS xxx Elective 3(x-x-x)</p> <p>IDS 697 Comprehensive Examination 0(0-0-0)</p> <p>IDS 698 Independent Studies 3(x-x-x)</p> <p style="text-align: right;">Total 9 credits</p> <p style="text-align: center;"><b>Total 36 Credits</b></p>

### **Applicants Qualifications**

The program is open to students with or without prior knowledge of politics and international studies who wish to increase their understanding of globalization and current events in international affairs. Students will gain a comprehensive understanding of various aspects of diplomacy and international relations, and also have the option to write a thesis/ an Independent Study in their chosen area of research.

### **Document Required**

Identification Card

House Registration

Passport (for foreign)

4 Photographs (1 Inch size)

Certificates Degrees

Transcripts

English Language Requirement (TOEIC score minimum 640, IELTS score minimum 5.5)

### **Contacts:**

- The Institute of Diplomacy and International Studies, Rangsit University 52/347

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- H.E. Sompong Sanguanbun (Dean and Program Director): [sompong.s@rsu.ac.th](mailto:sompong.s@rsu.ac.th)

- Nipa Arkarin (Administration): [nipa.a@rsu.ac.th](mailto:nipa.a@rsu.ac.th)

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E-mail: [tipp@mfa.mail.go.th](mailto:tipp@mfa.mail.go.th)

\*\*\*The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/ territories.



## Course Detail

### Master of Arts Program in International Development

<b>Course Title:</b>	Master of Arts Program in International Development
<b>Master Degree:</b>	Master of Arts Program in International Development M.A. (International Development)
<b>Academic Institution:</b>	School of Social Innovation, Mae Fah Luang University
<b>Duration:</b>	Two (2) academic years (August 2021 – May 2023)

#### Background and Rationale:

The Master of Arts Program in International Development is an English program aimed to strengthen students who seek for knowledge and skills in International Development. The curriculum is designed to be interdisciplinary and cover several aspects of international development practice including theoretical, debates, project planning and management. In terms of issues based on the location of the university as well as the expertise of lecturers, borderland, transboundary and transnational issues with receive high attention.

In response to the changing global-regional landscape and development in social, political, economic, and environment that has become more integrated with highly mobility of people and resources in the globalization era. This program is an interdisciplinary program that will provide comprehensive and intensive knowledge from both theoretical and practical perspectives through various academic disciplines.

The core of this program covers various academic areas; people-centered development, development cooperation, peace and conflict management, disaster, resources management, as well as human security in various categories including food security, sustainable development in the guideline of sufficiency economy and sustainable development goals (SDGs), which are seen as the key for future regional and global development in the 21<sup>st</sup> century.

Therefore, this curriculum will also promote this value through subjects focusing on cooperation and research linking several partners and stakeholders. In addition, sharing the border with less developed countries, this program will also facilitate students from neighboring countries for their capacity building so that the regional disparity will be lessened and cordial relationships will be enhanced.

The structure of the program is divided into 3 parts: required courses, elective courses and thesis. With the emphasis on practical skills, students are required to apply field works as one of the main research methods.

#### Objectives:

This program aims to produce graduates with the ability to address global agenda in the area of international development, especially the border issues. The program also aims to

educate the student to have understanding of theories, concepts and practicality of borderlands and management of transboundary issues in the Greater Mekong Sub-region at all levels of analysis (local, national, regional and international contexts).

### Course Synopsis and Methodology:

#### 1. Study Plan

##### Plan A2 (Course works and research)

Year 1					
Semester 1			Semester 2		
2301701	International Development: Rethinking	3	230xxxx	Elective 1	3
2301702	Human Security and Governance	3	230xxxx	Elective 2	3
2301703	Peace and Conflict Studies: Theories and Practices	3	230xxxx	Elective 3	3
2301704	Research Methodology	3	230xxxx	Elective 4	3
Total (credits)		12	Total (credits)		12
Year 2					
Semester 1			Semester 2		
2301791	Thesis	6	2301791	Thesis	6
Total (credits)		6	Total (credits)		6

#### 2. Course Content

##### Plan A (2):

##### 1) Core courses

**12 credits**

2301701	International Development: Rethinking	3(3-0-6)
2301702	Human Security and Governance	3(3-0-6)
2301703	Peace and Conflict Studies: Theories and Practices	3(3-0-6)
2301704	Research Methodology in International Development	3(3-0-6)

##### 2) Elective courses

**12 credits**

2301705	Development Policy: Practice and Advocacy	3(3-0-6)
2301706	Regional Cooperation and Cross-Border Mobility	3(3-0-6)
2301707	International Security in the New Era	3(3-0-6)
2301708	Civil Society and Transboundary Resources Management	3(3-0-6)
2301709	Development Project Management	3(3-0-6)
2301710	Capital Mobilization for Development: Investment, Aid, and Debt Management	3(3-0-6)
2301711	Community Resilience and Inclusive Growth	3(3-0-6)
2301712	Human Rights and Development	3(3-0-6)

2301713	Gender and Development	3(3-0-6)
2301714	Historiography	3(3-0-6)
2301721	Special Topic in International Development	3(3-0-6)

**3) Thesis****12 credits**

2301791	Thesis	12 credits
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**Graduation Conditions:**

- 1) The students must complete all courses required in the curriculum and have a GPAX not lower than 3.00.
- 2) The students have presented their thesis and passed the thesis
- 3) The students have submitted a complete thesis according to the format and number required by the university.
- 4) A thesis paper must be published; or a thesis paper or a part of it is accepted to be published in an academic journal(s); or the paper is presented in an academic conference in which a full thesis paper is published in the proceedings. The regulations regarding publication must in accordance with the program conditions and the university announcement.
- 5) The students who need to complete their degrees must have taken one of the following English Proficiency Tests prior to his/her thesis defense:

Types of Test	Required Scores
TOEFL (Paper based)	437
TOEFL (Computer based)	123
TOEFL (Internet based)	41
TOEFL (Institutional Testing Program) Level 1	500
IELTS (Academic module)	5
TU-GET	450
CU-TEP	45
CMU-eTEGS	60
MFU-TEP	50

\* The English Proficiency Test result should not exceed 2 years since the exam date.

**Applicant Qualifications:**

- 1) All applicants with a bachelor's degree in social science, political science, international relations, sociology, anthropology, history, humanity, and related fields with cumulative undergraduate GPAX not less than 2.50 to join the program.
- 2) All applicants are required one of the following English Proficiency Tests with a minimum score for graduation:

3) Types of Test	Required Scores
TOEFL (Paper based)	437
TOEFL (Computer based)	123
TOEFL (Internet based)	41
TOEFL (Institutional Testing Program) Level 1	500
IELTS (Academic module)	5
TU-GET	450
CU-TEP	45
CMU-eTEGS	60
MFU-TEP	50

\* The English Proficiency Test result should not exceed 2 years since the exam date.

- 4) The program admission committees make all admission considerations on a case-by-case basis.

**Document required:**

- 1) Application affixed with photographs;
- 2) A copy of transcript from attended institutions written in English
- 3) Evidence of English proficiency
- 4) Statement of purpose
- 5) Letters of recommendation from referee
- 6) A copy of passport

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 E-mail: tipp@mfa.mail.go.th

\*\*\*The application procedure will complete when TICA has received the hard copy of the application form and other related documents through the Royal Thai Embassy/Permanent Mission of Thailand to the United Nations/Royal Thai Consulate – General accredited to eligible countries/territories.